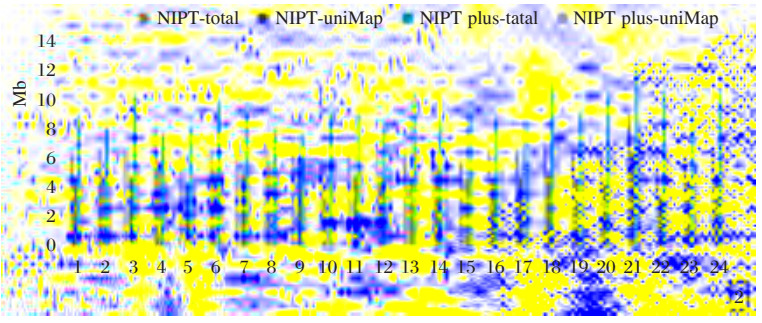
2024 1 16 1 113

Volume 16 Number 1 January 2024



12 24

Figure 12 Total Sequencing Data Amount and Effective Sequencing Data Amount of 24 Samples

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分子诊断与治疗杂志

扫码订阅《分子诊断与治疗杂志

分子诊断与治疗杂志
ˇY 2024 1 16 ◕ 1

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Monthly Volume 16 Number 13 January 2024

COMMENTS

ORIGINAL ARTICLES

REVIEWS

DPP 4 2

J ﻧ 4 DPP 4 ΅Ά΄Ή m ﻱ ę ζ ΅Ά
΅E ˛ ң Ỉ 1 ˛ ŏ Ά ΅Ά ŏ
ң l ɟ 2 ﻱ T2DM Ά NAFLD í ﻱ ה
ᷤ ; ɟ T2DM ﺍ NAFLD Ў ĭ Ў˛ T2DM ´ NAFLD ᷤ c
Ά Ỉ ŏ ɥ ɵ ΄Y NAFLD Ό ɔ ɷ ɻ
ѽ DPP 4 ΅Ά΄Ή ң T2DM ﺍ د ΄Y NAFLD
Ė Ə ɟ ъ DPP 4 ΅Ά΄Ή T2DM ´ NAFLD Ά ã̃ ɟ
J ﻧ 4 ΅Ά΄Ή 2 ﻱ

Progress of research on the mechanism of DPP 4 inhibitors in the treatment of type 2 diabetes mellitus complicated with nonalcoholic fatty liver disease

ZHANG Xiao ZHANG Rui WANG Hui WANG Yuan XU Jing

Department of Endocrinology the Second Affiliated Hospital of Army Medical University Chongqing China 400037

ABSTRACT Dipeptidyl peptidase 4 DPP 4 inhibitor is a new type of diabetes therapy drug. The main hypoglycemic mechanism of dipeptidyl peptidase 4 inhibitor is to increase endogenous glucagon like pep tide 1 by reducing the reduction of enterocagon thus promoting insulin secretion and inhibiting glucagon secre tion and reducing blood glucose level in the body. Type 2 diabetes mellitus T2DM and non alcoholic fatty liver disease NAFLD are common types of diseases in clinical and the incidence is high. T2DM and NAFLD can influence and promote each other. T2DM combined with NAFLD not only tends to increase the risk of cardiovascular diseases and aggravate endocrine and metabolic disorders but also tends to promote the progression of NAFLD leading to liver cirrhosis liver cancer and other malignant lesions. Many studies have shown that DPP 4 inhibitors can effectively reduce blood glucose levels and improve insulin resistance in pa tients with T2DM and have a good preventive effect on NAFLD. This article reviews the efficacy and safety of DPP 4 inhibitors in the treatment of T2DM with NAFLD.

KEY WORDS Dipeptidyl peptidase 4 inhibitors Type 2 diabetes mellitus Nonalcoholic fatty liver disease

Nonalcoholic fatty liver T2DM m Ь ŏ ᷤ
disease NAFLD m ė ɥ ж ▌
Ҡ Ά ɥ ´ ɷ ẇ Ҡ 90% 2 ɟ T2DM Ά ɷ ѡ ẇ
ė Ă 1 ɟ 2 ﻱ Type 2 diabetes mellitus ė Ă NAFLD Ж ה T2DM

2020MSXM085

400037

E mail 13512380018@163.com

T2DM NAFLD ה ●
ė [3] ɟ J ר 4 dipeptidyl peptidase 4
DPP 4 Ά Ή Ηᵐ ى DPP 4
Ά Ή Þ Ω вά Ω Ẇ Ω 11
[4] ɟ ώ Ь DPP 4 Ά Ή ı
T2DM NAFLD Ă
DPP 4 Ά Ή Ь T2DM NAFLD
Ą ε í w ל ɟ

1 T2DM NAFLD

Ą є ‖ ã NAFLD
ъ 1990~2006 25.26% 95% CI 21.59~
29.33 ɔ ╗ ǫ́ 2016~2019 38.00% 95% CI
33.71~42.49 ΄Y Ά T2DM ך ɔ
╗ † [5] ɟ Zheng [6] Ό Ą
ى ǫ́ 2015 ã 20~79 ж ו
ж ǫ́ Ъ 4.15 л
9.09% ΄Y Y щ ך ɔ ╗ ğ 2040
ж Ж ǫ́ 6.42 л ɟ [7] ğ Ψ
ǫ́ NAFLD Ά T2DM ΄Y Ą NAFLD Ό
T2DM ה 18%~33%
T2DM NAFLD ה 49%~62% ɟ

2 T2DM NAFLD

2.1 T2DM NAFLD ה Ά

T2DM NAFLD ה Ά ’
א в Insulin resistance
IR в א ו ɔ א ė Ą [3] ɟ
NAFLD Ά ΄Y Ą Ỉ Ą ц У
Ж Ầ ė У ӧ ч
א Ҡ
ו א Ό IR ו
[8] ɟ IR Ж Ψ є
Triglyceride TG Ά
ŏ T2DM NAFLD ה ה
Ă Ά ΄Y IR Ά NAFLD
ל ו Ą NAFLD ל
w Ẇ ε ל ● ė [9] ɟ ɔ
א Ж ғ Free fatty acid FFA
ɔ в ė ו ו ɔ
ו ’ Ж ғ ɔ NAFLD
ה [10] ɟ

2.2 T2DM NAFLD

T2DM NAFLD Þ
ו ɟ Diaconu [11] Ό
ו Ά T2DM NAFLD
Ÿ E ל
’ II ΄ Ά Ά
Ÿ E ל ɟ T2DM NAFLD
Þ J א в 1 Gluca
gon like peptide 1 GLP 1 ɔ ו Ή Ά
2 Sodium glucose cotransporter 2
SGLT2 Ά Ή [12] ɟ J א
ל ו Ψ ï
GLP 1 ɔ ו Ή Ą
Ά ‴ א ‴ SGLT2 Ά Ή
Ẇ в Ẇ˳ w Ẇ
ц Ά Ế [13 14] ɟ DPP 4
Ά Ή ى ζ GLP 1 ו
Ά н ΄Y Ÿ ו ’
ɔ Ά ɔ Ė
T2DM NAFLD ’ [15 16] ɟ

3 ⊢DPP 4

[m] Ỉ ŏ ŏ
א ו ğ
~ У א ώ ה ζ
Ą GLP 1 Ά ŏ
Glucose dependent insulinotropic polypeptide GIP
Ξ

ʹY ę ђ ĭ ŏ β ڊ ɟ Ə
˛ β ŏ [22] ɻ DPP 4
ʺĄ ʹĦ DPP 4 GLP 1 ɔ GLP 1
Á ﻩ GLP 1 Ə Ң˛
ŏ Ė Ə [19] ɻ ɟ DPP 4 ʺĄ ʹĦ
ġ DPP 4 Ə DPP 4 GLP 1
א ˛ ŏ ɻ

4 DPP 4 T2DM NAFLD

4.1 ɳ א

ɔ ´ Ấ Ж ﻩ

De novo lipogenesis DNL DNL Ж У ф
A ɔ ˛ ŏ ƚ
NAFLD ה ה [3] ɻ DNL
ɔ ´ ẃ Θ ´ 1c Á
ŏ ۷ IR У ĭ T2DM ɞNAFLD
ה [23] ɻ Shabalala [24] Ȯ IR Ж l
DNL ╗ Á ŏ ﻩ FFA
ʾ א ɞ ɔ א ש א
ъ ה NAFLD ɻ Ideta [25] ε DPP 4
ʺĄ ʹĦ ﻩ ɔ ﷺ
w ש ɳ Ă ڊ ɟ
ʺE Ψ DNL ɋ NAFLD
ɻ Rameshrad [26] Ȯ DPP 4 ʺĄ ʹĦ
˝ c ╗ β Ə Á Ψ
ʹY ﻩ ɔ Á ʺE
TG Á DNL ɻ ɟ DPP 4 ʺĄ ʹĦ ɳ
DNL ʺE א ɋ T2DM ´
NAFLD ɻ

4.2 ʺE א

א T2DM Ė ĭ ˛ ɟ
Ж ۷ ɱ ˝ w ש β ʾ
ŏ ʺE [27] ɻ
א Á NAFLD ה ה ʹY Ă
א NAFLD ε ɔ ש
˝ ƚ [28] ɻ Hiromura [29] Ȯ
DPP 4 ʺĄ ʹĦ ɳ Ă
ʺE l א Ė ɻ ۷
[30] ε DPP 4 ʺĄ ʹĦ Ң ʺE T2DM
א Ė ɻ ɟ
DPP 4 ʺĄ ʹĦ ʺE א T2DM
´ NAFLD ɻ

4.3 ɔ א

NAFLD FFA Ж ﻩ
Ĭ ɔ א
NAFLD ˜ ˝ ƚ [31] ɻ T2DM Ң
╗ Ȯ ɔ א
ה ﻩ O ۴ ۷
۸ ã̃ [32] ɻ Ozutsumi [33] DPP 4 ʺĄ
ʹĦ Ң ɳ ɔ א
Ė ʹY ʺĄ ɔ
ɳ ε ɔ ɻ Ide [34]
Ȯ DPP 4 ʺĄ ʹĦ ʺĄ l Ĭ
ɔ א ʹY ɗ ɔ א
Ă ʾ ɻ

4.4 ɗ

IR T2DM ζ ה Ɑ ɟ ς
NAFLD ה Ă ɟ ɻ Baumeier [35]
DPP 4 Ж IR Á
ƚ NAFLD ה ה ɻ Okura
[36] Ȯ DPP 4 ʺĄ ʹĦ ʾ ɗ
ɗ Ъ ɗ IR ɻ Liu
[37] DPP 4 ʺĄ ʹĦ 3
/ / 4 מ ˝
ה Ə ɗ IR ɻ Okuyama [38]
Ȯ DPP 4 ʺĄ ʹĦ ɗ IR ɗ IR
Á ɟ 1 ʺĄ ƚ ɻ

5 DPP 4

DPP 4 ʺĄ ʹĦ Ң ﻱ ę ã̃
ɔ ɋ í ├ Ə Ă ɻ ω [39] ŏ
Ȯ DPP 4 ʺĄ ʹĦ T2DM ʺĄ
ﷺ Ψ ɱ Á ę ђ ˝ Ï Θ
ה ɱ Ė ã̃ ɻ Dutta [40]
DPP 4 ʺĄ ʹĦ ɱ T2DM
ɔ Á ɗ IR
ʹY ﻩ ˝ Ï Θ ה ɔ
ɻ Komorizono [41] ġ DPP 4
ʺĄ ʹĦ Á J א T2DM ´ NAFLD
ﷺ 52 ۷ ˜ Ξ ˝ Ï Θ ה
Ỹ ɻ Li [42] Ȯ DPP 4 ʺĄ ʹĦ
Ң ν T2DM ɗ
ʹY Ė ɔ ɻ ώ Ң ƒ DPP 4
ʺĄ ʹĦ ã̃ ˝ Ï Θ ה
╗ Ш [m] ɻ

6

T2DM ɗNAFLD ה ̈Ą ɔ ̨ą̈
ɕ ĭ̈ DPP 4 ̈Ą ̓Ḥ ğ̈ ң Ά˳
ŏ Ė ‴ c ̈E
א ɷ א ɷ ɔ א w ẇ נ IR
Ь T2DM ´ NAFLD Ė ɵ
e ΄Y ̈E NAFLD ε ɔ Ά
‴ ל ɟ DPP 4 ̈Ą ̓Ḥ ã̃ ۱
ɔ ‴ Ï Θ ה Ь
T2DM ´ NAFLD Ė ώ̈ ɟ

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18 ۱ ► . 2 ىي כ J נ 4 ۱ כ ң ל J . Ψ ه 2022 30 2 111 115.

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1 2 3 4 1 2 1 2

ὰ Ϗ Ἡ ᵃ ל ⊦ Ἀ Ἄ Ꮒ Ἡ
ɵ ɟ ⱬ Ế ὰ Ϗ ᾐ ẹ ђ Ɑ ι ɑ16s rRNA ŏ ᾐ ᶣ
PCR Ἡ ~ Ὸ 18 oy ɑŏ ~ ὰ Ϗ Ἡ ᵃ ל ⊦ ɟ ᵐ
ל ⊦ ╟ Ə ל ⊦ ᶣ ₱ ∤ ɟ ᵃ ל ⊦ ₿
8 oy ל ⊦ P1~P8 ɑ10 oy ל ⊦ N1~N10 ɑ1 oy ל ⊦ R ∤ 1 oy ל ⊦ L L ʄ
ε 1×10⁸ CFU/mL ɟ 4 ל Ά Ђ ᵃ ל ⊦ ╟ Ə Ἀ
Ἄ ε ´ 8/8 ´ 10/10 Ὸ ε 1×10³ CFU/mL ᾐ ᶭ ɔ
10 ᶣ ε Ύ Ct ᵉ ᵉ ל ᵐ Ꮒ 5.0% ɟ ᵃ ל ⊦ ᶣ ₱ Ct ᵉ ל
ᶣ ᵐ Ꮒ 5% ´ ᵴ 2~8 ὰ Ɵ ɑ 7 ᶣ ǐ ל ⊦ ɟ ' Ђ
ὰ Ϗ Ἡ ᵃ ל ⊦ ' ᏂᏯ Δ Ἡ ח Ἀ ᾐ ɵ ɟ
ὰ Ϗ ᵃ ל ⊦ ɵ

Establishment of a national reference panel for *Vibrio vulnificus* nucleic acid detection kits

ZHAO Lanqing[1 2] LIU Hong[3] DENG Mingjing[4] MA Tingting[1 2] XU Sihong[1 2]

1. Division of Diagnostic for Infectious Diseases National Institute for Food and Drug Control Beijing China 100050 2. NMPA Key Laboratory for Quality Research and Evaluation of In Vitro Diagnostics Bei jing China 10050 3. Procurement Management Department of The 983rd Hospital of Joint Logistics Sup port Forces of Chinese PLA Tianjin China 300142 4. School of Life Sciences Peking University Bei jing China 100091

ABSTRACT Objective To establish a national reference panel for Vibrio vulnificus nucleic acid de tection reagents and set standards which aimed to evaluate the quality of related kits. Methods A variety of Vibrio vulnificus and other Vibrio pathogens were collected and cultured. After colony identification 16s rRNA sequencing analysis and detection of a real time fluorescence quantitative PCR reagent 18 samples were selected diluted and packaged to form a national reference panel for Vibrio vulnificus nucleic acid detection kits. Different laboratories were invited to coordinate calibration of the panel and the uniformity and stability were further investigated. Results The established national reference panel included 8 positive references P1~P8 10 negative references N1~N10 1 repetitive reference R and 1 limited detection reference L Refer ence L was determined the concentration of 1×10⁸ CFU/mL by colony counting methods. Four laboratories par ticipated in the collaborative calibration of national reference materials and developed quality standards based on the results positive coincidence rate of 8/8 negative coincidence rate of 10/10 the detection limit is at

2018ZX10102001 002 002

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2. 100050
3. 300142
4. 100091
E mail: xushong@nifdc.org.cn

ὰ Ϗ m ﺱ ǎ Ь

в ж ɕ φm 1 Ь

1964 ﻫ Ӓ ﺍ Ψ Ŏ ᾰ

1979 ﻝ ~ 2 ɟ ὰ Ϗ ẵ

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ᾰ Ь ﺵ i ﻁﻠﺴﻲ Ψ

У ɨ ﺍ Ϗ i Ж

У ł Ш ó

ל ł ł

1.2.3 ֍ ₱

ל ۵ Ψ Ă ֍ ₱

ך 5 ל ł R ę ã ɔ˜

ƒ DNA ˘ ŏ ą̈ 1Б10 ۱ 1Б100

oy ˜ ך˜ ƒ ĭ

oy ă ˘ Ḥ 3

Ĭ ۱ ל CV ł Ḥ Ш

Ct ≤ 40 ó ε Ct > 40 Ct ᵉ ó ε ł

1.2.4

ƒ ĭ oy ă ˘ Ḥ

ל ł ŏ ך 6 ң

Ό ל ł L ŏ 2 3 ל ł ´

1 Y ă Ĭ ł 2 ŏ ą̈ Нь 2~8 ỳ

۱ 7 d ğ́ 1 d ѳ3 d ѳ5 d ۱ 7 d ך Ό ƒ

DNA/RNA ˘ 10 ʁ Ѿ 10~1×

10^7 CFU/mL ך Ά 0 d

ł ɒ̄ ך 2 ל ł ŏ ą̈ Нь

2~8 ỳ ۱ 7 d ã

Ά 0 d ƒ GraphPad Prism 6.0

t ŏ ł

2

2.1 è ɷ Ẇ

20 oy è ɷ ۱ ɕ ˜

8 oy à Ҡ Ɑ ۱ 10 oy ę ђ Ə ε

ł 1 ł S53 ѳS59 ֍

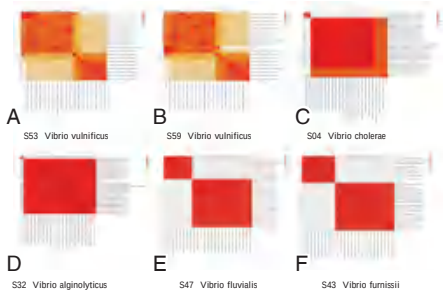
ε à Ҡ S04 ѳS32 ѳS47 ۱ S43 ŏ ą̈ ε ɷ

ɷ ɷ ۱ ł ѧ 1 ł

1 20

Table 1 Screening rechecking and verification of 20 candidate strains

Ɑ ˜	è		
		16S rRNA	à Ҡ Ḥ ẉ PCR
S52, S53, S55, S56, S57, S58, S59, S61	à Ҡ	+	+
S54, S60	à Ҡ	+	-
S04, S05, S11	ɷ	+	-
S22, S24		+	-
S32, S33		+	-
S38	Ė	+	-
S47		+	-
S43		+	-



1 ANI

Figure 1 Sequence clustering and ANI heat maps of Vibrio vulnificus and control Vibrio strains

18 oy Ɑ ₱˜ ŏ ɷ à

Ҡ Ḥ ۵ ל 8 oy ל

ł P1~P8 ѳ10 oy ל ł N1~N10 ѳ1 oy ל

ł R ۱ 1 oy ң Ό ל ł L L ƒ

ε 1×10^8 CFU/mL ł

2.2 ╟ Ə Ẇ

4 ╟ Ə ;

+/+ ֍ ε 8/8 ´ -/- ֍ ε 10/10 ң

Ό ŏ C ε 1×10^3 CFU/mL Ẇ w ɔ

ę æ 3 ֍ ε 1×10^2 CFU/mL Ẇ w ɔ ł

ל CV ֍ ğ́ 5% w Ĭ ł 2 ł

2 4

Table 2 Collaborative test results of 4 laboratories

	ל ˜ ł				
		A	B	C	D
´	P1~P8	8/8	8/8	8/8	8/8
´	N1~N10	10/10	10/10	10/10	10/10
ң Ό	L	1×10^2 CFU/mL	1×10^2 CFU/mL	1×10^3 CFU/mL	1×10^2 CFU/mL
%	R 1:10	0.4	1.3	0.5	1.3
	R 1:100	0.5	1.3	0.6	0.9

Ѽ Ѿ Ѽ ל

Ѿ ; ל ł P1~P8 ֍ ε à

Ҡ 8/8 ל ł N1~N10 ֍

ε à Ҡ 10/10 Ό ε 1×10^3

CFU/mL Ẇ w ɔ ε 10 ֍ ε

Ѵ CV Ѽ Нь 5.0% ł

2.3 ֍ ₱

֍ ε ł ۵ 2 ł ל ł

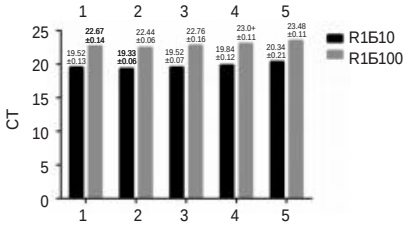
R 1Б10 ۱ 1Б100 ˜ 15 Ct ᵉ

CV ŏ ą̈ ε 1.9% ۱ 1.7% ł

2.4

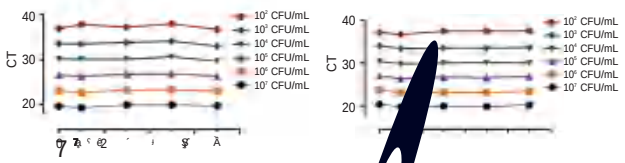
ң Ό ל ł L ˜ ğ́ 2~8 Ẇ

1 d ѳ3 d ѳ5 d ѳ7 d ֍ ε ł ۵ 3 ł



2 5 1 10 1 100

Figure 2 Test results by dilution of 1 10 and 1 100 of 5 repetitive references



A ε ң Ό ϧ ł L Њ 2~8 ŭ B ε ң Ό ϧ ł L Њ 7 ŭ ɟ 3 L 2~8 7

Figure 3 Stability analysis of the limited reference L at 2~8 and room temperature for 7 days

5 Coerdt KM Khachemoune A. Vibrio vulnificus review of mild to life threatening skin infections J . Cutis 2021 107 2 E12 E17 > ž l· ς ű

NIPT plus MMS

1 1 2 2 2 2

ὰ У ᾤ NIPT plus ᾯ l / ´ MMS
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24 ɂ ᾐ 10 ɂ NIPT plus

2021 276

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2. 510000
E mail 13570474904@163.com

Нь О ´ [4] Ж Ŏ I /
ө [e] ң Ό NIPT plus
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я I Ψ Ė ө [e] [5] ɟ
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3 860 ʒ ɔ à У ѿ Ŏ
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´ micro deletion/micro duplication syndrome
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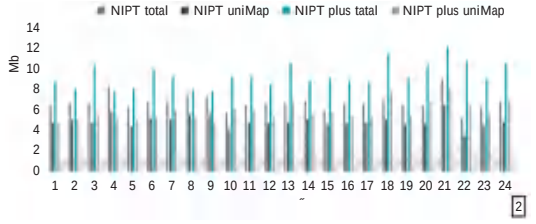


2 24

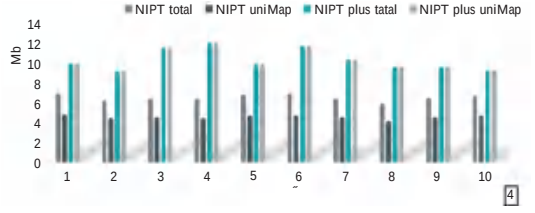
Figure 2 Total Sequencing Data Amount and Effective Sequencing Data Amount of 24 Samples

3 10 cffDNA

Figure 3 cffDNA concentration of 10 quality assessment samples

2.2 ł ų ŸẄ Ą

24 ϟ ϑ Ɔ ņ 22 ϟ ε MMS Ɓ 2 ϟ ϵ ł ɟ 1 ɟ



4 10

Figure 4 Total Sequencing Data and Effective Sequencing Data of 10 Quality Evaluation Samples

Ĥ 2 ϟ ϵ ł ϑ

ų 1 ϟ Ỹ ˚ ˜ ; 21 ϟ ϑ ϒ ;

ų ɟ ę Ψ 9 ϟ ˚˛ Ẉ Ỳ ϭ

β ئ Ψ ϖα ئ Ψ ę æ 12 ϟ ϑ ł

ɾ ɟ NIPT plus 1 ϟ 18 ϵ ł 1 ϟ 21 ϵ ł

2 ϟ MMS NIPT 1 ϟ 18 ϵ ł 1 ϟ 21 ϵ ł ɟ

10 ϟ NIPT plus 9 ϟ MMS ɟ 2 ɟ

ζ del22 ϖdup20 ϖdel5 ϖdel1 ɟ ϧ 5~9 ɟ ˛

9 ˝ ϯ MMS Ỹ ; T SCAs

NIPT c 9 ˝ ε SCAs ɟ 24 ϟ í

ϟ 10 ϟ NIPT plus MMS

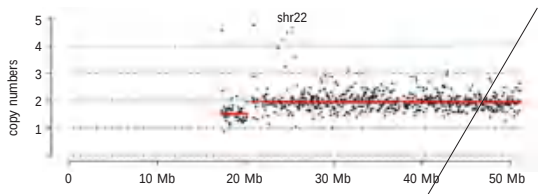
ę ’ 35.5% ɟ 3 ɟ

1 24

Table 1 Relevant results of 24 clinical samples

˝	CNV Ĥ	CNV	NIPT plus	NIPT	
1	21*2.62	>3 Mb	21 ϵ ł	21 ϵ ł	ų
2	Del 16 p11.2	868 Kb	-	-	
3	Del 4 q35.2	1.3 Mb	-	-	
4	Del 9 q33.1	104 Kb	-	-	
5	18*2.72	>3 Mb	18 ϵ ł	18 ϵ ł	ų
6	Dup 16 p11.2	2.3 Mb	-	-	
7	Dup 17 q24.1q25.3	63.1 Mb	-	-	Ẉ Ỳ
8	Del 16 p11.2	1.3 Mb	-	-	β ئ Ψ
9	Del 14 q11.2	634 Kb	-	-	ų Ĥ ĥ
10	Del 9 p23	967 Kb	-	-	ų ´ ϸ
11	Dup 1 q43q44	10.7 Mb	-	-	
12	Dup 4 q35.2	1.1 Mb	-	-	
13	Dup 16 p11.2	1.9 Mb	-	-	
14	Del 16 p11.2	1.4 Mb	-	-	
15	Del 16 p11.2	1.8 Mb	-	-	
16	Dup 7 p21.3p22.1	18.7 Mb	-	-	´ Ŧ ;
17	Del 12 q11q12	1.0 Mb	-	-	ئ Ψ α 3.7 ´
18	Dup 21 q22.3	983 Kb	Dup 21	-	~ í ϸ ų
19	Del 16 p11.2	1.3 Mb	-	-	
20	Dup 21 q22.3	908 Kb	Dup 21	-	ų Ẋ ´ ´ ; ϸ
21	Del 2 p12	1.1 Mb	-	-	
22	Dup Y q11.221q11.223	18.5 Mb	-	-	
22	Dup Y p11.2q11.221	15.6 Kb	-	-	
23	Del 14 q11.2	521 Kb	-	-	
24	Del 5 q23.1	1.4 Mb	-	-	

ɬ - Ń ɟ



5 22q11

Figure 5 22q11 deletion syndrome

3

MMS l ɔ ﻩ

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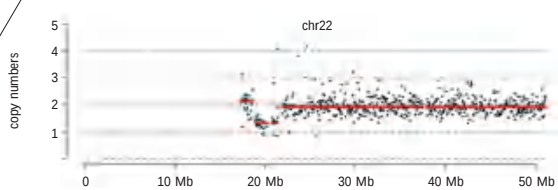

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Figure 8 Cattle howling syndrome

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ˊ ´ У ώ [9 10] ɟ NIPT plus

ˊ c l ʁ l ɵ

e [8 11] ’ MMS Ό Њ

’ Ό MMS ὰ ң Ђ У

Ά NIPT Ã ئى ų

l ɟ

NIPT plus

Serum D D PCT and CRP are closely related to the progression of MPP and can be used as important indica tors for prognosis assessment. The combination of the three is more conducive to determining the severity and prognosis of children with MPP.

KEY WORDS D dimer PCT CRP Mycoplasma pneumoniae pneumonia

Ɑ l Mycoplasma pneumonia

MPP Ɑ l Mycoplasma pneumoniae

MP ก Ђ ẏ p c j _ r c b r m

n % χ^2 Pearson ŏ D D ɷPCT ẇ CRP Ά CPIS ŏ Ă Ą ɔ Ə ROC ŏ D D ɷPCT ẇ CRP ₸ᵐ ɷ ´ MMP ỵ ~ Ţ ɵ ᵉ ℮ ẇ P<0.05 ε Ė τ ɟ

2

2.1 ˝ O ỵ D D ɷPCT ɷCRP ẇ CPIS ŏ

D D ɷPCT ɷCRP ẇ CPIS ŏ ℮ Ћь Ė τ P< 0.05 ɟ 1 ɟ

1 D D PCT CRP CPIS x̄±s

Table 1 Comparison of serum D D PCT CRP levels and CPIS scores in children with different disease degrees x̄±s

ğ	n	D D μg/L	PCT ng/L	CRP mg/L	CPIS ŏ ŏ
	104	0.17±0.08	7.15±2.06	12.75±3.74	5.11±1.48
	47	0.69±0.22	12.54±3.69	21.23±5.81	8.22±3.07
t ᵉ		21.259	11.479	10.760	8.412
P ᵉ		<0.001	<0.001	<0.001	<0.001

2.2 D D ɷPCT ẇ CRP Ά CPIS ŏ Ă

D D ɷPCT ɷCRP ℮ Ά CPIS ŏ ∖ Ă r=0.593 ɷ0.617 ɷ0.568 P<0.05 ɟ

2.3 ˝ ~ ỵ D D ɷPCT ɷCRP

~ 121 ʒ ~ ˝ 30 ʒ ɟ ~ ˝ D D ɷPCT ẇ CRP ℮ Ћь ~ Ė τ P< 0.05 ɟ 2 ɟ

2 D D PCT CRP x̄±s

Table 2 Comparison of serum D D PCT and CRP levels in children with different prognos x̄±s

ğ	n	D D μg/L	PCT ng/L	CRP mg/L
~	121	0.14±0.05	7.79±2.34	10.59±3.08
~ ˝	30	1.10±0.35	13.01±3.56	34.74±7.58
t ᵉ		29.272	9.760	27.292
P ᵉ		<0.001	<0.001	<0.001

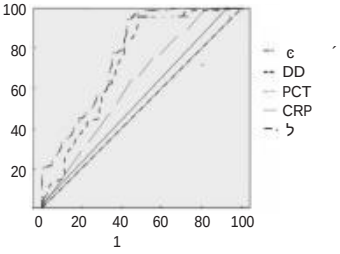
2.4 D D ɷPCT ẇ CRP ₸ᵐ ɷ ´ MMP ỵ ~ Ţ ɵ ᵉ

ROC D D+PCT+CRP ε 0.932 ε 0.901 AUC=0.856 95% CI 0.846~0.935 ℮ Ћь D D ɷPCT ẇ CRP ₸ᵐ P< 0.05 ɟ 3 ɷ๖ 1 ɟ

3 D D PCT CRP MMP

Table 3 Evaluation value of single and combined D D PCT and CRP for the prognosis of children with MMP

ğ		AUC	95% CI	ᵉ	P ᵉ
D D	0.766	0.724	0.566	0.539~0.793	1.26	<0.001
PCT	0.734	0.706	0.537	0.517~0.788	0.37	<0.001
CRP	0.698	0.0.673	0.526	0.501~0.733	49.29	<0.001
D D+PCT+CRP	0.932	0.901	0.856	0.846~0.935		<0.001



1 ROC

Figure 1 The ROC curve

MPP ה Ά l א ɷẍ ' ğ̈ᵐ Ă Ɑ l ' ƒ l ה ẍ א ė ⁷ ɟ PCT ~ ḭ ğ̈ ж l Ψ˜ ң ж ה ж l Ỉ ъ ɷ ẇ ğ̈ ϖ ė α Tumor necrosis factor alpha TNF α ɷ ч 6 Interleukin 6 IL 6 Ə ; ' ´ ŏ PCT ⁸ ɟ ѧ ɷ ɯ PCT 1 ng/mL PCT≥2 ng/mL ˜Ω Ấ ɷ ה ' ⁹ ɟ O PCT Ό ɔ ╗ Ỹ ɟ í ε PCT ' Ћь ɵ l ~ Ỹ ´Y ' Ţ ¹⁰ ɟ ~ PCT ğ̈ Ỉ ' ; א φ PCT Ό ɭ ɔ ˝ ȳ ¹¹ ɟ ~ PCT ң Ћь ~ ˝ Ά ¹¹ Ч ɟ l ה Ҡ ğ̈ ė Ə ; CRP ╗ ɟ Ỹ ; CRP ╗ Ά ∖ Ă ¹² ɟ ğ̈ ˝Ą˜ CRP ЖĮΌ ; ´Y ˝ ɔ ɷẍ ˝Ą ˙Ң ĭ ¹³ ɟ ɷ ~ ˝ CRP Ћь ɷ ~ CRP ' ɵ MPP ẇ ~

ó ɻ ŏ MPP ṿ CRP ښ
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Ϛ ε Ɠ ı ɔ ặ MP ˬ Ж ה
א w ᗡ ı Ả ˬ א Ж
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14 ɻ D D ε У ẹ
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O ɻ ה D D ǯ א Ψ Ẻ
m Ə D D ɔ ╗ Ά ┘ в
Ẻ Ặ ΄Y Ά O
۱ Ặ 15 ɻ MPP ṿ ı Ỉ ɣ ᗡ ı
ה א ה Ђ в

2.2 / Ά FDP ẇ D D / FDP ɷD D ჳ Ⱨь τ P<0.05 ɟ 2 ɟ

2

ɝ

ᾳ	n	FDP μg/L	D D mg/L
· /	33	3.17±0.70	0.74±0.29
	123	2.41±0.46	0.45±0.23
t e		7.468	6.070
P e		<0.05	<0.05

2.3 / Ά ɻ / IL 6 ɷIL 17 ჳ Ⱨь τ P<0.05 ɟ 3 ɟ

2.4 / FDP ɷD D Ά ɻ Ą / FDP ɷD D Ά IL 6 ɷIL 17 Ė Ą Ą P<0.05 ɟ 4 ɟ

2.5 / ĭ ɻ logistic ɤ ŏ FDP ɷD D ɷIL 6 ɷIL 17 Ə ε ƅ Ả logistic ɤ ی ŏ w ı ה / Ə ε ɻ ƅ ŏ FDP ɷD D ɷ IL 6 ɷIL 17 ჳ ה / ĭ ɻ ɟ 5 ɟ

2.6 FDP Ά D D ´ / ROC ŏ FDP Ά D D ╥ ẇ ´ / ROC 6 ɷ 1 ɟ

3

/ PCI Ψ ה φm Ė I ч Ả ợ Ỉ ﻫ Ύ ợ Ố ɷж Ố ‴ 6 7 ɟ AMI PCI Ψ / Ά ~ ‴ Ї Θ ה Ą ɻ ğ PCI ѽ Ấ / ң Ψ / ה ɷ ~ ‴ Ї Θ ה ẇ د ~ Ė τ ɟ / ה Ậ ę Ψ Ỉ Ố ѽ ɔ ǫ̃m ’ / نح ɟ PCI Ψ Ố Ж ʐ Ỉ Ӌ Ố Ỉ ה Ƙ~ ĭ 8 9 ɟ Ψ ğ ¨H ۱ ´ D D ğ Ψ У ה У FDP ɟ PCI ѽ D D ╗ Ά PCI Ψ / ה Ą ж ╥ D D / ң 4 10 Ά ę ђ

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~ ė ŏ ẇ ROC ŏ
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ɟ ǧ logistic ė ŏ Ψ ώ D D ɗFDP ɗL 6 ɷ
IL 17 ҕ PCI Ψ / ї̈ ė ǧ ≈
ɔ ROC ŏ D D ẇ FDP ╥ ẇ
´ ҕ PCI Ψ / Ė ɵ e ΄Y Ξ
´ ∤ ŏ
ą̃ ą̃ 86.18% ∤ 81.82% ɟ
ɔ ώ FDP ╗ Ά AMI
PCI Ψ ה / Ą FDP ´ D D
PCI Ψ / ɟ

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1. 100160
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The multiple logistic regression was used to analyze the risk of adverse pregnancy outcomes in pregnant wom en with GBS infection factor. Results The levels of IL 6 PCT and TNF α in the control group were lower than those in the GBS group P<0.05 . The incidence rates of premature birth premature rupture of mem branes fetal distress neonatal GBS infection and neonatal pathological jaundice in the control group were low er than those in the GBS group P<0.05 . After inspection and follow up it was found that 37 women in the GBS group had adverse pregnancy outcomes and 88 women had normal pregnancy outcomes there was no sta tistically significant difference in the adverse pregnancy outcome group and the normal pregnancy outcome group in terms of gestational age whether they were primipara etc. P>0.05 . Comparing the age GBS in fection grade serum IL 6 PCT and TNF α levels between the two groups showed statistically significant dif ferences P<0.05 . Multiple logistic regression analysis showed that age ≥ 35 years old the classification of GBS infection as GBS carrier or GBS chorioamnionitis IL 6 >0.463 ng/L PCT ≥ 0.5 ng/mL and TNF α ≥ 30 fmol/mL were risk factors for adverse pregnancy outcomes in pregnant women with GBS infection P< 0.05 . Conclusion Serum IL 6 PCT and TNF α levels are elevated in patients with adverse pregnancy out comes in GBS infected mothers. The three indicators can be used as important indicators for monitoring and preventing adverse pregnancy outcomes in GBS infected mothers.

KEY WORDS IL 6 PCT TNF α GBS infection Pregnant women Adverse pregnancy outcomes

B Group B Streptococcus GBS
У ğ ה GBS ’
У w ẇ У ה
[1] ɟ [2] ğ GBS
~ Ƙ ה ğ 30% ˆ
ẏ [m] Ж ה ɟ ğ Ả
I Ỉ Ж ٧ ╗ I
ɔ Ă ą̈
ğ I א
Ύ У ğ ŭ I ظ Ж ה ל כ
ъ ṇ I У ŭ ė
ғ Ї Ө ה [3] ɟ ч 6
Interleukin IL 6 в Ɗ Procalcitonin PCT в
ש ė α Tumor necrosis factor α TNF α
Ά א Ą Ύ í в w ẇ ó
~ ɟ Ὸ IL 6 TNF α
GBS У Ė [m]
Ə [4] ɟ ğ ŭ IL 6 ФPCT ФTNF α Ά
GBS Ą ɟ

1

1.1 [m]

ך 2020 5 2022 3 Њ ├
←Ш ֍ ├ У w ẇ У 125 ҂
GBS ε GBS ɟ ę Ψ
21~38 ֍ 27.84±3.62 è У 75 ҂
У 50 ҂ ٧ 34~40 ٧ ֍ 36.53±1.04 ٧
GBS [5] GBS 31 ҂ GBS Ж í
78 ҂ GBS 16 ҂ ɟ Ɠ ך̓
ŧ У 100˜ ε ę Ψ 20~35
֍ 27.51±3.44 è У 61 ҂ У
39 ҂ ٧ 35~40 ٧ ֍ 36.75±0.83 ٧ ɟ Ξ
[m] τ P>0.05 Ė
’ ɟ ├ Ң ٧ Ж Ă̓ ɟ
ẇ ̓ Ш ɟ
Ả Ă GBS У ´ GBS
Ă [6] ֍ ε ╥ í د
֍ Ɔ ɟ Ă
´ в ♥ w ẇ ã̃
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1.2

1.2.1 GBS

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ך ŭ ~ Ά ğ
٧ [m] ٧ Ả GBS ⸿ Ψ
ą̈ ȳ w ɔ 5 cm ṇ ;
Њ GBS ⸿ Ψ ˙ ⸿ 9 mL
37 Ψ ɟ PCR
Ѧ ɮ ε ۵ ABI7500 RESL TIME PCR ŭ
Ѧ Ὴ ắ ˘ w ɟ

1.2.2 IL 6 ФPCT ФTNF α

ğ GBS ѽ в ך У
5 mL ғ ى
HT12MM w 3 000 r/min в ╚ ε 5 cm

10 min ŏ ɻ ẍ Ч

IL 6 Ḥ ╟ ă ˘ w в

PCT Ḥ ɔ ă ˘ w в

TNF α Ḥ ă ˘ w ɻ

1.2.3 [7]

Ξ У 1 Y У

Ὸ в У в

4 GBS logistic

Table 4 Mr G ù

ė	e	β e	SE e	Wald χ^2 e	OR	95% CI e	P e
	0=<35 1=≥35	2.476	0.267	5.349	1.697	1.005~2.864	0.007
GBS õ	0=GBS Ж í 1=GBS GBS	3.165	1.153	6.725	12.815	9.608~17.165	0.012
IL 6	0=0.373~0.463 ng/L 1=>0.463 ng/L	2.986	1.087	5.646	9.167	6.875~12.2847	0.022
PCT	0=<0.5 ng/mL 1=≥0.5 ng/mL	0.657	0.264	6.193	1.929	1.150~3.237	0.013
TNF α	0=<30 fmol/mL 1=≥30 fmol/mL	0.674	0.265	0.975	2.016	1.152~3.487	0.033

VSD

1 1 1 1 1 2 1

♥ VSD ˜ ה ɐ
ɻ ɐ ' ǐ ɟ ך 2020 12 2022 6 ← ├ ɕ ├
87 ° ʔ Ǐ ɻ ~ ה ෆ ε ę Ψ Ɑ 55 ʔ m ෆ ´ Ƙ i
32 ʔ ǧ Ƙ ה m à ~ Ǐ ɻ à ğ Ǐ ɻ ɻ ɻ
à ~ ෆ ǧ à ‴ ã́ ´ ´ VSD n=46
n=41 ŏ Ɑ ŏ ɐ Ξ ɐ ɻ ש ɻ α
TNF α ² ɐ ч 6 IL 6 ɕ C א CRP ɐ ' Ỹ Ặ ɐ Ặ ' ѡ ѽ l '
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E mail huazer11@163.com

crosis factor α TNF α interleukin 6 IL 6 C reactive protein CRP levels functional recovery knee ankle and limb function recovery

ɷC א ɞ ϖ ɻ α Tumor necrosis factor TNF α ɞ ч 6 Interleukin 6 IL 6 ɔ ϥ ɲ Ế +

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w ˜H à VSD II ɳ˜ ę ɷɲw ẅ ⅃ ϣ ã ˙Y i à ٩ م ~ ʄ à ę ♥ m ٩˜ ϥ Ό à Ą Ỹ ɟ

à w Ƀ ɟ ~ Ɛ ٩ م Ό¨E ɷni ~ ę˘ ~ à Ỹ ɟ

à ɞŏ ɲ Ế ɞɔ w ϣ í ´ ó Ą˜ ϖ 3 ٩ Ỉ ´ ɟ

1.3

1.3.1 Ɑ ŏ

ώ 87 ϛ ϑ ɲ Ế ϣ Ң Ҍ 3 h Ỉ 2 ɲ Ế ϥ ΄YҌ Ѧ ѧ ɲ ắ ˘ VITEK 2Compact 2 ɲ Ế Ắ˃ Ң Ɑ ɲ Ế ɦ ã ѧ í Ə ɦ[6] Ɑ ŏ ٩ ѧ NEW ɷATB ŏ Ѧ ε ATCC29213 ɞ ɲ ATCC25922 ˆ ℸ ATCC27853 ɟ

1.3.2

Ƀ Ą ɞà ɞ ɞ ɞЧ ɟ

1.3.3 ė

Ắ ώ ϣ ˜ 1 ٩ ɣ ε ˘ VSD ϟ Ā 5 mL ʄ 3 000 r/min ŏ ⊥ 9 cm 10 min˜ ϥ Ό ң ⅃ ɟ ẍ ɲ ẇ ϖ ɻ ė α Tumor necrosis factor TNF α ɞ ч 6 Interleukin 6 IL 6 ɷC א C reactive protein CRP ɟ

1.3.4 ı ˈ [7]

ʄ Ă ŏ Hospital for Special Surgery Knee Score HSS w ϣ Baird Jackson ˈ ŏ Ă w ϣ Ă ˈ ŏ ŏ Ă ˈ Ỹ ɟ ϟ Paley ĂA ı ˈ Ỹ ŏ ę Ψ Ƀ Ɓ ɞ ɞ ˈ ɞ 4 Y Ɓ = Ɓ+ / ϛ ×100% ɟ

1.4

SPSS 22.0 Ө ŏ $\bar{x} \pm s$ t n % χ^2 w P<0.05 ε Ė τ ɟ

2

2.1 Ɑ ŏ 87 ϛ Ắ 87 Ɑ ę Ψ ẳ 43 49.42% ẳ 32 36.78% 12 13.80% ɟ 1 ɟ

1

Table 1 Comparison of the composition and distribution of pathogens between the two groups

Ɑ			%
ẳ		43	49.42
		26	29.88
	¨H ;	12	13.79
		1	1.15
	ę ɦ	4	4.60
ẳ		32	36.78
	ɲ	19	21.84
	ˆ ℸ	6	6.90
	˄	3	3.45
		1	1.15
	ę ɦ	3	3.45
		12	13.80
	ˆ H	8	9.19
	ˆ H	2	2.30
	ẉ ⊨ ˆ H	1	1.15
	ę ɦ	1	1.15
Ắ		87	100

2.2

Ң Ą ɞà ɞЧ ɞ ϑ Ң ϑ τ P<0.05 ɟ 2 ɟ

2.3

˜ Ξ TNF α ɗL 6 ɷCRP ϑ ; ę Ψ ϟ ɔ ε τ P< 0.05 ɟ 3 ɟ

2.4 ı ˈ

˜ Ξ HSS ɷBaird Jackson ŏ ϑ ɜ ╗ ę Ψ ϟ ɔ ε τ P< 0.05 ɟ Ɓ ε 95.65% Ң Ɓ 80.49% τ P<0.05 ɟ 4 ɟ

2 x̄±s

Table 2 Comparison of surgical related indicators between the two groups x̄±s

ą̈	n	Ą̈ d	à d	d	Ч d	
	46	11.32±3.62	25.82±6.17	8.14±3.21	34.13±2.64	2.35±0.71
	41	20.38±5.84	40.55±7.63	16.17±4.15	43.97±4.45	8.17±1.26
t e		8.798	9.945	10.153	12.703	26.957
P e		<0.001	<0.001	<0.001	<0.001	<0.001

3 x̄±s

Table 3 Comparison of inflammatory indicators between the two groups before and after treatment x̄±s

ą̈	n	TNF α pg/mL		IL 6 pg/mL		CRP mg/dl	
		ą̈̇	~	ą̈̇	~	ą̈̇	~
	46	278.76±27.82	93.19±15.43[a]	361.54±9.88	128.31±13.09[a]	1.89±0.15	0.75±0.17[a]
	41	279.13±28.74	165.32±16.22[a]	362.12±8.06	175.52±15.38[a]	1.87±0.13	1.16±0.14[a]
t e		0.059	21.245	0.298	15.465	0.661	12.190
P e		0.953	<0.001	0.767	<0.001	0.511	<0.001

Ά ą̈̇ [a]P<0.05 ɟ

4 x̄±s n %

Table 4 Comparison of limb function between the two groups before and after treatment x̄±s n %

ą̈	n	HSS ŏ		Baird Jackson ŏ		Б
		ą̈̇	~	ą̈̇	~	
	46	36.14±10.73	60.41±8.19[a]	63.57±7.63	91.49±4.31[a]	44 95.65
	41	36.87±10.64	49.36±10.63[a]	63.04±7.17	83.31±6.62[a]	33 80.49
χ^2/t e		0.318	5.463	0.333	6.901	4.900
P e		0.751	<0.001	0.740	<0.001	0.027

Ά ą̈̇ [a]P<0.05 ɟ

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̈Ą J . ├ ŏ 2023 20 1 70 77.

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was analyzed by the receiver operating characteristic ROC curves. Results The APACHE score lactic acid concentration and D dimer level in the observation group were higher than those in the control group t= 4.269 8.785 2.746 P<0.05 . The proportion of mechanical ventilation SOFA score stay time in ICU and PCT level in the death group were higher than those in the survival group χ^2=4.847 4.940 8.256 12.474 P< 0.05 the APACHE score lactic acid and D dimer in the death group were higher than those in the survival group t=2.629 9.702 3.086 P<0.05 . Pearson correlation analysis showed that the APACHE score was positively correlated with the lactic acid concentration and D dimer level P<0.05 . Logistic regression analy sis showed that mechanical ventilation APACHE score ≥ 22.28 points and lactic acid concentration ≥ 3.58 mmol/L were independent risk factors of poor prognosis P<0.0.5 . The ROC curves analysis showed that the area under the curve AUC of the APACHE score combined with the lactic acid concentration and D dimer for predicting poor prognosis was 0.

3 Logistic

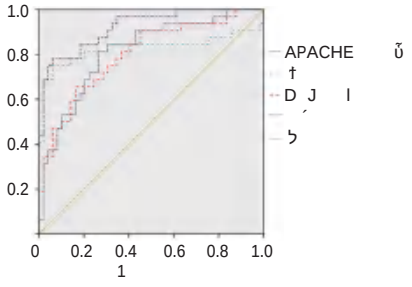
Table 3 Logistic regression analysis on the influencing factors of prognosis in patients with severe infection

m	β e	SE e	Wald χ^2 e	OR e	95% CI	P e
ı vs	1.015	0.411	6.099	2.759	1.233~6.175	0.014
SOFA ŏ <11.27 ŏ vs ≥11.27 ŏ	0.981	0.502	2.740	2.296	0.858~6.141	0.099
ICU Ч <5 vs ≥5	0.649	0.473	1.883	1.914	0.757~4.836	0.171
PCT <5.23 ng/mL vs ≥5.23 ng/mL	0.958	0.496	3.731	2.606	0.986~6.891	0.054
APACHE ŏ <22.28 ŏ vs ≥22.28 ŏ	0.856	0.417	4.214	2.354	1.039~5.330	0.041
† <3.58 mmol/L vs ≥3.58 mmol/L	0.977	0.428	5.211	2.656	1.148~6.146	0.023
D J l <11.28 ng/mL vs ≥11.28 ng/mL	1.014	0.545	3.462	2.757	0.947~8.022	0.064

4 APACHE D ROC

Table 4 ROC characteristics of APACHE score lactic acid concentration and D dimer for predicting poor prognosis in patients with severe infection

	AUC	Ά			e	95% CI	P e
APACHE ŏ	0.814	0.049	0.812	0.735	22.28 ŏ	0.718~0.909	<0.001
†	0.827	0.059	0.750	0.939	3.58 mmol/L	0.710~0.943	<0.001
D J l	0.800	0.051	0.656	0.830	11.28 ng/mL	0.700~0.900	<0.001
´	0.921	0.030	0.718	0.945		0.862~0.980	<0.001



1 ROC

Figure 1 ROC curves

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ɷAPACHE II ŏ ≥22.28 ŏ ɻ †
≥3.58 mmol/L ɕ ε ĭ ę ~ ‴

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AFP GP73 GPC3

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ŏ AFP ɞ ɜ ı 73 GP73 ẇ 3 GPC3 ğ Ɑ ɲ ẇ ~ Ţ Ψ ɵ e ɟ ɳ 2021 5 2022 5 m ├ Ɑ ɲ 52 ɻ ε Ɠ ɳ̃ ɔ 46 ɻ Ά ɾ ı 48 ~ ŏ ά ε ɔ Ά ɾ ɟ ɕ w ẇ PHC ̊ ̃ ŏ AFP ɞGP73 ẇ GPC3 PHC ̊ ̃ ~ m ẇ AFP ɞGP73 ẇ GPC3 ẃ Logistic ɾ ŏ ĭ PHC ~ ● ɻ Ά ROC ŏ AFP ɞGP73 ẇ GPC3 ╥ ẇ ´ PHC ɟ AFP ɞGP73 ɞGPC3 PHC > ɔ > ɾ Ė τ P<0.05 PHC ̊ ̃ ŏ AFP ɞGP73 ɞGPC3 > > > Ė τ P<0.05 ~ 45 ɻ ~ ̊ 7 ɻ ɟ Ξ ά ɞ ɞBMI τ P>0.05 ɟ Ξ ¨H Ɑ ɞ ɞ A1 ɞGGT ɞAFP ɞGP73 ɞGPC3 Ė τ P<0.05 ẃ Logistic ɾ ŏ ¨H Ɑ ɞ ɞ A1 ɞGGT ɞAFP ɞGP73 ɞGPC3 ɔ ╗ ĭ PHC ~ ̊ ● ɻ P<0.05 AFP ɞGP73 ɞGPC3 ´ PHC ɞ ŏ ά ε 0.956 ɞ0.857 AUC=0.950 95% CI 0.909~0.991 Ь AFP ɞGP73 ɞGPC3 ╥ ɟ AFP ɞGP73 ɞGPC3 ɕ ´ ğ PHC Ψ Ė í ɵ e ' Ь PHC í ' ɔ Ţ PHC ~ Ỹ ɟ AFP GP73 GPC3 Ɑ ɲ

Value of serum AFP GP73 and GPC3 detection in the diagnosis and prognosis assessment of primary liver cancer

HE Ping[1] XU Jingyi[2] ZHANG Xuexue[1] CHEN Xiaolong[1]

1. Department of Infectious Diseases the First Affiliated Hospital of Zhengzhou University Zhengzhou Henan China 450000 2. Department of Otology the First Affiliated Hospital of Zhengzhou University Zhengzhou Henan China 450000

ABSTRACT Objective To evaluate the value of serum alpha fetoprotein AFP Golgi glycoprotein 73 GP73 and phosphatidyl inositol proteoglycan 3 GPC3 detection in the diagnosis and prognosis of primary liver cancer. Methods 52 patients with primary liver cancer admitted to the First Affiliated Hospital of Zhengzhou University from May 2021 to May 2022 were selected as the study objects another 46 cases with cirrhosis and 48 cases healthy physical examination admitted to our hospital during the same period were selected as the cirrhosis group and the health group respectively. The levels of AFP GP73 and GPC3 were compared among the three groups and the PHC group at different pathological stages the general prognostic data of PHC and levels of AFP GP73 and GPC3 were compared Multiple logistic regression was used to ana

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E mail heping1233@163.com

lyze the risk factors affecting the prognosis of PHC. The ROC curve was drawn to analyze the diagnostic effect of serum AFP GP73 and GPC3 alone and combined detection of PHC. Results The levels of AFP GP73 and GPC3 were as follows PHC group > cirrhosis group > healthy group the difference was statistically sig nificant P<0.05 . AFP GP73 GPC3 levels in the PHC group with different pathological stages were > > > the difference was statistically significant P<0.05 . There were 45 cases in the good prognosis group and 7 cases in the poor prognosis group. There was no significant difference in gender age and BMI be tween the two groups P>0.05 . The levels of prothrombin red blood cell count apolipoprotein A1 GGT AFP GP73 and GPC3 were significantly different between the two groups P<0.05 . Multiple logistic regres sion analysis showed that the increased levels of prothrombin red blood cell count apolipoprotein A1 GGT AFP GP73 and GPC3 were risk factors for poor prognosis in PHC patients P<0.05 . The sensitivity and specificity of the combination of AFP GP73 and GPC3 for diagnosis and prognosis of PHC were 0.956 and 0.857 respectively The AUC=0.950 95% CI 0.909~0.991 which was significantly higher than AFP GP73 GPC3 detection alone. Conclusion The combination of serum AFP GP73 and GPC3 has a high clini cal value in the diagnosis of PHC and can be used for the early diagnosis of PHC. The prognosis of patients with PHC can be evaluated by detecting the serum levels of the above indicators.

KEY WORDS AFP GP73 GPC3 Primary liver cancer

Ɗ ה Primary liver cancer PHC í ε PHC ę Ψ 41 ϛ 11 ϛ ҕ 49.62±2.95 ҕ l Body mass index BMI 17.59 ± 1.24 kg/m² ɟ TNM ŏ [6] 18 ϛ 16 ϛ 8 ϛ 10 ϛ ɟ Ấ Ấ ´ ɦ Ɗ ה ה Ẁ ğ Y ″H ’ ◗ Ǐ 1 [1] ɟ ğ PHC ה Ẁ ’ ƒ 5 ǫ̈ 50%~70% [2] ɟ ɣ в PHC в Ẁ ~ Ė τ ɟ ѽ í ε alpha fetoprotein AFP Ь ǫ̈ PHC в ɔ Ė τ ğ PHC Ψ AFP ∖ ╗ ’ Ə ε PHC ж ę ğ ŏ PHC Ψ ∖ ɣ c ˚ AFP PHC Ά Ė [m] [3] ɟ Ặ PHC Ψ ’ ∾ l 73 Golgi glyco protein 73 GP73 Ά 3 Phos phatidyl inositol proteoglycan 3 GPC3 ╗ [4] ɟ Ặ GP73 Ά GPC3 ğ AFP Ψ Ό ’ Ь PHC [5] ɟ ğ ŏ AFP в GP73 Ẁ GPC3 ğ PHC Ẁ ~ Ţ Ψ в [e] ; ɟ

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1.1 [m]

ϥ 2021 5 2022 5 [m] ├ Ɗ ה 52 ϛ ε PHC ę Ψ 41 ϛ 11 ϛ ҕ 49.62±2.95 ҕ l Body mass index BMI 17.59 ± 1.24 kg/m² ɟ TNM ŏ [6] 18 ϛ 16 ϛ 8 ϛ 10 ϛ ɟ Ấ Ấ ´ ɦ Ɗ ה 2019 ɦ Ặ Ấ [6] í ф в ˚ ь ’ ɟ Ấ P ¥ ę ɦ ƀ ϟ ´ ɟ ɒ Ố ϥ ɔ 46 ϛ Ά ≠ l 48 ~ ŏ ǫ̈ ε ɔ Ά ≠ ę Ψ ɔ 39 ϛ 7 ϛ ҕ 45.36±3.95 ҕ BMI 17.63± 1.23 kg/m² ɟ Ấ Ấ ´ ɦ ɔ ≟ɦ Ặ Ấ [7] í ğ ∾ ´ Ẁ Ặ l ɟ Ấ PHC ɟ ≠ 40 ~ 8 ~ ҕ 46.90±4.95 ҕ BMI 18.15±2.10 kg/m² ɟ ɕ [m] í τ P> 0.05 ’ ɟ ├ Ң ∖ Ж Ấ Ύ ɔ Ẁ ɟ 1.2

1.2.1 AFP вGP73 Ẁ GPC3

PHC в ɔ Ấ ≠ Ь l ҕ 5 mL ″H Ǐ 3 000 r/min в15 min в ╚ 10 cm ğ 6 h Ǐ ã ɔ ה ẉ Ѧ E601 ѽ в ɔ ה ẉ AFP

ẍ Ϥ GP73 ϐGPC3 Ḥ Ћь ѧ Phoenix ắ ˘ O Ш Ө ɟ

1.2.2 PHC Ό ˜ 3 Y Ђь ˜ Ỹ ˜ Ỹ ŭ ε ˜ ẇ ˜ ˝ ɟ ˜ ה ڍ ˈ ẇ H ˜ ˝ ה ڍ ˈ H ⁶ ɟ

1.3 SPSS 21.0 Θ ŭ $\bar{x}\pm s$ ŭ F Ξ ƒ t n % χ^2 ɟ J ẃ Logistic ع ŭ ǐ PHC ˜ ˝ • ė Ά ROC ŭ AFP ϐGP73 ϐ GPC3 ₸ ẇ ´ PHC ɟ ᶜ w P<0.05 ε Ė τ ɟ

2

2.1 ˝ ж AFP ϐGP73 ϐGPC3 AFP ϐGP73 ϐGPC3 PHC > ɔ > ғ Ė τ P<0.05 ɟ 1 ɟ

2.2 ˝ ŭ PHC AFP ϐGP73 ϐ GPC3 AFP ϐGP73 ϐGPC3 > > >

4 Logistic PHC

Table 4 Risk factors for poor prognosis in PHC patients using binary logistic regression analysis

ġ	e	β e	SE e	Wald χ^2 e	OR 95% CI e	P e
¨H Ɑ	0=10~15 mg/dL 1=<10 mg/dL ɵ>15 mg/dL	1.128	0.373	4.628	3.089 1.487~6.417	0.003
	0= 4.0~5.5 ×10^{12}/L 1=>5.5×10^{12}/L 0= 3.0~5.5 ×10^{12}/L 1=>5.5×10^{12}/L	1.197	0.257	6.483	3.310 2.000~5.477	0.005
A1	0=1.20~1.60 g/L 1=>1.60 g/L	1.482	0.308	5.826	4.401 2.406~8.050	0.008
GGT	0=5~54 U/L 1=>54 U/L	1.507	0.425	4.218	4.513 1.962~10.381	0.016
AFP	0=0~25 μg/mL 1=>25 μg/mL	1.082	0.728	18.693	2.950 0.708~12.291	<0.001
GP73	0=10~12 mg/L 1=>12 mg/L	1.127	0.541	10.102	3.086 1.068~8.911	<0.001
GPC3	e	1.060	0.608	9.742	2.886 0.876~9.503	0.002

PHC ɵ ŏ ą̈ ε 0.956 ɵ0.857 ; ɥ ɟ

AUC=0.950 95% CI 0.909~0.991 Ɦ AFP ɵ ƾ Ά AFP Ą̆ ת ġ Ő ´

GP73 ɵGPC3 ╥ P<0.05 ɟ 5 ɵ๖ 1 ɟ AFP Ψ AFP ʹΩ Ж ╕ ɟ

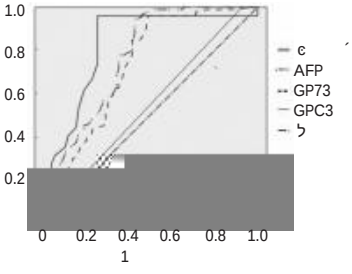
90% w ɔ PHC Ψ Ж Ό AFP ɔ ╕

5 AFP GP73 GPC3 PPHC ε AFP ’ Ə ε PHC [9] ɟ

Table 5 Diagnostic efficacy of AFP GP73 and GPC3 in patients with PPHC GP73 ẇ GPC3 ğ PHC Ψ ∖

ġ	AUC	95% CI			P e
AFP	0.583	0.530~0.714	0.690	0.596	<0.001
GP73	0.607	0.548~0.782	0.714	0.622	<0.001
GPC3	0.614	0.556~0.799	0.705	0.684	<0.001
AFP+GP73+GPC3	0.950	0.909~0.991	0.956	0.857	<0.001

ğ AFP Ψ Ş ’ ∖ PHC Ė m ɵ e [10] ɟ GP73 Ɦ ğ ת I Ψ Ỹ Ψ GP73 Ɦ ɔ Ψ ¨H ω ą̈ GP73 ɟ 70%~80% ’ GPC3 ∖ ε ę Ά ה ɵ ~ Ė [11] ɟ



1 ROC

Figure 1 ROC curve

Ό AFP ɵGP73 ɵGPC3 ğ Ψ ɔ ╕ Ύ Y ¥ O ę Ş ∖ ╕ † ɛ ’ Ə ε ~ ● ġ [12] ɟ ẃ Logistic ء ŏ AFP ɵGP73 ɵGPC3 ǐ PHC ~ ● ġ Ά Ч [12] ɛ Ά PHC ~ Ą̆ Ύ ɟ PHC ~ ~ 2 Y Ỉ AFP ’ م ~ AFP Ό ɔ ╕ ʹΩ Ύ ~ ˝ ȳ [11] ɟ GP73 ğ Ψ ה ε ɔ ╕ † ɾ ж Ψ GP73 GP73 Ά Ỉ ġ Ą̆ Ψ GP73 ’ ó Ύ ~ ~ [10] ɟ GPC3 Ά ŏ ɵ ġ ɵ ∖ ¨Ą Ў Ə ’ Ƙ Ά ת ˝ ğ Ψ ą̈m Ə ɟ ₔ Ỉ GPC3 ҥ m ~ GPC3 ε ה ● ת ˝ [13] ɟ ε GP73 ɵGPC Ά AFP ´ ą̇ Ɦ PHC ẇ ~ [14] ɟ

3

PHC ѿ ₔ 2 Ң ġ [8] ɟ Ɦ PHC ┼ í ˝ ė ی Ė m Ɩ ε Ψ ˘ ȳ ɟ ġ PHC ẇ ¨Ą ę ה ẇ ~ Ė m Ə ɟ PHC AFP ɵ GP73 ɵGPC3 ҙ Ɦ ɔ Ά ɾ ʹY ˝ ŏ PHC AFP ɵGP73 ɵGPC3 ğ AFP ɵGP73 ɵGPC3 Ά PHC ה ɵ ה Ė m Ą̆ ɟ AFP ğ Ɦ Ψ m ẏ ∖ ◓ ش ´ ẏ Ό ~ AFP

ROC AFP ɑGP73 ɑGPC3 ´ 1

combined with human interferon α 2b gel . The clinical efficacy vaginal microecological score Nugent local microimmune status of the cervix IL 4 IL 10 TNF α interleukin 2 IL 2 interferon γ IFN γ level positive expression rate of indoleamine 2 3 dioxygenase IDO IL 10 IL 4 TNF α in cervical lesion tissue between the two groups were compared. Results After the treatment the total effective rate in the control group was 83.54% and that in the study group was 93.90%. The total effective rate in the control group was lower than that in the study group the difference was statistically significant P<0.05 the vaginal microecological environment restoration rate in the study group 92.68% was higher than that in the study group 82.28% and the pH value and Nugent score in the study group were lower than those in the control group the difference was statistically significant P<0.05 . After the treatment the levels of IL 2 and IFN γ cytokines in the two groups increased and the study group was higher than the control group the levels of IL 4 IL 10 and TNF α in the two groups decreased and the study group was lower than the control group the difference was statistically significant P<0.05 . The positive expression rates of IDO IL 10 IL 4 and TNF α in cervical lesions in the two groups were lower than those before treatment and the study group was lower than the control group the difference was statistically significant P<0.05 . Conclusion The application of Lactobacillus live capsule combined with human interferon α 2b gel in the treatment of HSIL patients with CKC with HR HPV infection after surgery is more effective which is beneficial to maintaining a stable cervical microecological environment improving immune regulation and reducing inflammatory.

KEY WORDS Lactobacillus live bacteria capsule Human interferon α 2b gel HSIL CKC HR HPV IL 4 IL 10 TNF α

ɔ Ỉ ƙ High grade squamous in traepithelial lesion HSIL ʜᵐ ѽ ƙ ę ⅵ ɔ † ה ʹY ה ε 30~50 [1] ɟ ѽ í Ɦь HSIL ך ά ὺ ʹY cold knife con ization CKC HSIL CKC ˜ ЩЖѰO ה Ỹ ה ζ Ɑ ع ● ى ж † High risk human papillomavirus HR HPV Ỉ ɓ pH [e] ɓẍ [2] ɟ ч 4 Interleukin 4 IL 4 ŏ ǔ ẍ Ψ ⅵ [3] ɟ ч 10 Interleukin 10 IL 10 ч ẍ א غ ’ w ا ẍ ⅈ Ѽ [4] ɟ ש غ α tumor necrosis factor α TNF α ’ ǔ ا Ỉ ה ɓ Ə [5] ɟ ж Ə ε ¥ HR HPV ’ د ẍ ‘ † ش Ỉ T د Ə ɟ ǔ † ش ╟ ж α 2b ¨H HSIL CKC ˜ ¥ HR HPV ẇ IL 4 ԁL 10 ẇ TNF α ĭ ;

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1.1 [m]

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P>0.05 ’ ɟ ├ Ң
ϟ Ж Ά ɟ

1.2

Є w ж α 2b ¨H Ẇ Δ
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1.3

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1.3.2 طص

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Б † †
ŏ pH e Ң 4.5 Nugent Ң 3 ŏ
ϟ ğ 1~9 Y φ Ң 1 000 Y H_2O_2
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1.3.3 ẍ

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4 mL w 2 000 r/min ╚ 5 cm
10 min ~ ɔ Ầ EP Ỉ -70
ắ ɟ ṭ ẍ Ψ IL 10 ɞ
IL 4 ɞTNF α ɞ ч 2 Interleukin 2 IL 2 ɞ
γ interferon gamma IFN γ ɟ IL 2 ɞ
IL 4 ɞIL 10 Ḥ ئ ṭ Biosource ắ ˘ w
IFN γ ɞTNF α Ḥ ѧ R&D ắ ˘ w ɟ

1.3.4 ƾ ϟ ỉ 2 3 א
Indoleamine 2 3 Dioxygenase IDO ϟ IL 10 ɗL 4 ɞ
TNF α 9
ğ ѽ ϟ 3 Y ~
ƾ ṭ ẍ ɔ IDO ɗIL 10 ɞ
IL 4 ɞTNF α ğ ʁ ; ϥ 5 Y ‴
┘ ط >500 Y Ỉ
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▌ ŏ Ţ ɟ ˅
Ţ 3 ŏ 2 ŏ 1 ŏ 0 ŏ
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▌ >75% 3 ŏ ▌ 50%~
75% 2 ŏ ▌ 10%~50% 1 ŏ
▌ ≤10% ɟ ŏ = ŏ +
ŏ ɟ ˅ ŏ ó
≥6 ŏ Ψ 4~5 ŏ 2~3 ŏ
0~1 ŏ ɟ = + + Ψ
/ ϥ ×100% ɟ Ḥ ε ɔ ắ
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SPSS 21.0 Θ ŏ
$\bar{X}\pm S$ Ξ Ξ ƒ t
n % χ^2 ɕ w P<0.05 ε Ė
τ ɟ

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~ ε 83.54%
ε 93.90% ң
τ P<0.05 ɟ 1 ɟ

1 n %

Table 1 Comparison of clinical efficacy between the two groups n %

ą̈	n							
	79	24	30.38	42	53.16	13	16.46	66 83.54
	82	37	45.12	40	48.78	5	6.10	77 93.90
χ^2 e								4.347
P e								0.037

2.2 طص
~ طص
92.68% 82.28% pH e Ά Nugent
ŏ ɕ ң ɕ τ P<
0.05 ɟ 2 ɟ

2 n % x̄±s

Table 2 Comparison of local microecological environment of cervix between the two groups n % x̄±s

ą̈	n	Ỹ %		ŭ pH e	Nugent ŭ
	79	65 82.28	14 17.72	4.61±0.79	3.12±0.69
	82	76 92.68	6 7.32	4.02±0.41	2.06±0.42
χ^2/t e		4.004		4.146	8.180
P e		0.045		<0.001	<0.001

2.3 ẍ

~ Ξ IL 2 ɗIFN γ ė ę ɔ ╗ Ύ Ξ IL 4 ɗIL 10 ɞTNF α ę ; Ύ ң ę τ P<0.05 ɟ 3 ɟ

2.4 ƀ IDO ɻ IL 10 ɗIL 4 ɞTNF α

~ Ξ IDO ɗIL 10 ɗIL 4 ɞTNF α ώ ң Ύ ң τ P<0.05 ɟ 4 ɞ 1 ɟ

3

HSIL ε ώ ƀ HR HPV HSIL ζ ė í Ψ Ң HSIL ą̇ CKC ŭ HSIL CKC ~ щ HR HPV ъ ה ⁱ⁰ ɟ ė HSIL CKC ~ ¥ HR HPV ш

3 x̄±s

Table 3 Comparison of local cervical microimmune status between the two groups x̄±s

ą̈	n	IL 2 pg/mL		IFN γ μg/L		IL 4 pg/mL		IL 10 pg/mL		TNF α pg/mL	
		ώ	~	ώ	~	ώ	~	ώ	~	ώ	~
	79	10.13±1.36	13.45±2.11[a]	8.33±1.26	11.42±2.21[a]	13.46±2.43	10.31±1.23[a]	13.42±2.41	10.34±1.25[a]	15.64±1.22	13.16±0.97[a]
	82	10.19±1.15	15.33±2.20[a]	8.26±1.34	13.35±2.36[a]	13.39±2.25	8.56±1.22[a]	13.34±2.39	8.77±1.19[a]	15.44±1.18	11.26±0.86[a]
t e		0.208	3.801	0.234	3.681	0.130	6.217	0.145	5.593	0.726	8.993
P e		0.836	<0.001	0.816	<0.001	0.897	<0.001	0.885	<0.001	0.470	<0.001

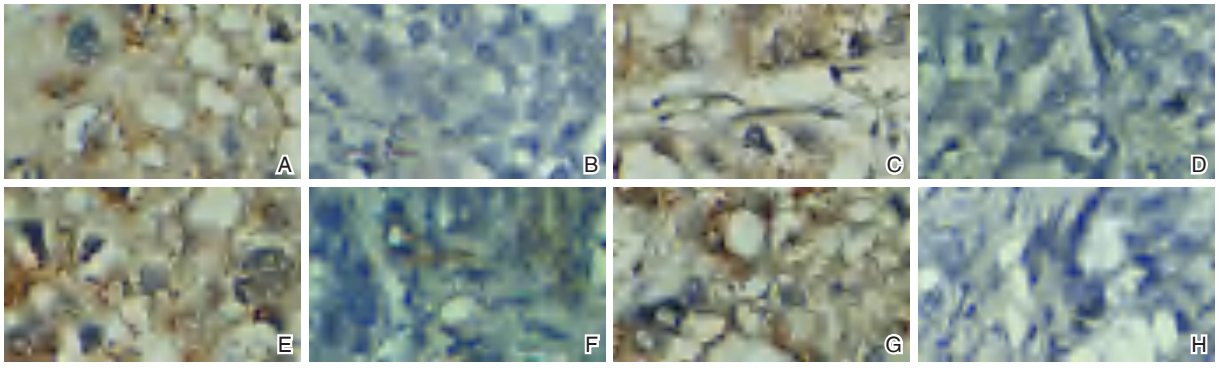
Ά ώ [a]P<0.05 ɟ

4 IDO IL 10 IL 4 TNF α n %

Table 4 Comparison of IDO IL 10 IL 4 TNF α positive expression in cervical lesions between the two groups n %

ą̈	n	IDO		IL 10		IL 4		TNF α	
		ώ	~	ώ	~	ώ	~	ώ	~
	79	53 67.09	12 15.19 [a]	57 72.15	11 13.92 [a]	49 62.03	13 16.46 [a]	59 74.68	13 16.46 [a]
	82	61 74.39	4 4.88 [a]	63 76.82	3 3.66 [a]	59 71.95	5 6.10 [a]	67 81.71	4 4.88 [a]
χ^2 e		1.038	4.780	0.464	5.341	1.795	4.347	1.167	5.711
P e		0.308	0.028	0.496	0.021	0.180	0.037	0.280	0.017

Ά ώ [a]P<0.05 ɟ



A. IDO B. IDO C. IL 10 D. IL 10 E. IL 4 F. IL 4 G. TNF α H. TNF α ɟ

1 IDO IL 10 IL 4 TNF α ẍ ɔ ×100

Figure 1 Positive and negative immunohistochemical pictures of IDO IL 10 IL 4 and TNF α immunohistochemical staining × 100

ת ɟ ѽ í ж α 2b
¥ HR HPV HSIL Ά
ɔ l ´ ע Ἀ ᾷ
ɞ ӧ [11] ɟ ѿ ж
α 2b ɔ ´ † ш HR HPV
[12] ɟ
Ψ í
Ά ɔ ѿ
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HR HPV í ɟ
† ш ε[m] Ἀ Ḥ ę ’
ẅ Ψ † Ǐ ɟ
† ш HR HPV
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Ἀ HPV ●
[13] ɟ [m] ŏ ظ
ɻ ӧ ѽ IDO ɗL 10 ɗL 4 ɞTNF α
ظ
Ύ pH [e] Ά Nugent ŏ ҷ
ң Ξ IL 2 ɗFN γ ġ ҷ ɔ ╗ Ύ
Ξ IL 4 ɗL 10 ɞTNF α ҷ ;
Ύ ң Ξ ƾ
IDO ɗL 10 ɗL 4 ɞTNF α ѽ
ң Ύ ң ɟ † ш
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HPV Ỹ ظ I ӧ
Ὼ ң א ɟ ŏ Ɑ ġ ж Ά ɔ
I ´ ~ ’ ¨E HPV ´ Ἀ HPV Ǐ
DNA ɻ Ἀ ъ ᾷ Ə ɟ †
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Ǐ Ύ †
ш ’ w ɔ ӧ ‘
ӧ ‘ ɔ IL 2 ɗFN γ ġ ; IL 4 ɞ
IL 10 ɞTNF α ġ ך Ǐ ӧ
[14] ɟ̌ † ш ’
ӧ ‘ Ǐ ך
Ə ң ġ IL 4 ɗL 10 ɞTNF α
Ἀ א ъ ¨E I Ỹ Ἀ HSIL
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α 2b ¨H HSIL CKC ~ ¥ HR HPV
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1 . HIV ѽ ę ǐ
ġ J . Ψ ه 2019 19 5 748 753.

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4 ٧ . T w ѽ IL 10 ɗNF γ ѿ ~ Ψ í τ J . ɥ ├ 2022 50 1 53 56.

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12 ¨O . † ш ´ ж α 2b ¨H ● یی ж † ٩ ġ ǐ J . ɥ⁄ ├ 2022 22 3 468 471+490.

13 . ш Ю Ƴ

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TCT HR HPV

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نح TCT Á ● ﻱ ж † HR HPV

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2. 731100
E mail 13909301560@163.com

diagnosis the pathological p7 ş ς Ṽ ă

1.3

SPSS 20.0 Θ ŏ ɟ w n % χ^2 ɟ w P<0.05 ε τ ɟ

2

2.1 TCT ɵHR HPV ≉ ɨ Ỹ

6 762 ϛ ↄ Ψ TCT ∤ HR HPV ≉ ɨ ŏ ᾳ 705 ϛ ∤ 884 ϛ ▌ ŏ ᾳ ε 10.43% ɵ13.07% ɟ 1 ɵ2 ɟ

1 TCT n %

Table 1 TCT results n %

	Ὸ ϛ	▌
ח	6 057	89.57
ASCUS	304	4.50
LSIL	261	3.86
HSIL	117	1.73
SCC	23	0.34

2.2 Ỹ

TCT ∤ HR HPV ≉ ɨ 1 289 ϛ ẇ Ἄ Ὸ 838 ϛ ▌ 65.01% ẹ Ψ CIN1 452 ϛ ▌ 53.94% CIN2 180 ϛ ▌ 21.48% CIN3 129 ϛ ▌ 15.39% 77 ϛ ▌ 9.19% ɟ ẹ æ 451 ϛ ᵭ ε ɟ

2.3 TCT ɵHR HPV ≉ ɨ Ά

TCT ε 40.65% HR HPV ≉ ɨ 49.50% TCT+HR HPV ≉ ɨ 54.38% ɟ TCT+HR HPV ≉ ɨ Ηь ╥ TCT ∤ HR HPV ≉ ɨ τ χ^2=48.730 ɵ6.168 P<0.05 ɟ 3 ɟ

2.4 TCT ɵHR HPV ≉ ɨ ẇ ´ ẇ ᾠ ϟ ɵ [e] w ≥CIN1 ε ᾹA ɟ TCT Ά HR HPV ≉ ɨ ´ ϟ ɵᾹA ᵭ Ηь TCT Ά HR HPV ≉ ɨ ╥ τ χ^2=79.550 ɵ 41.259 ɵ15.145 ɵ4.262 P<0.05 ɟ 4 ɟ

3

¨H ѧ Ỉ ئى ŏ ئى ┘ ң Ж ъ ᾶ ѧ

2 HR HPV

Table 2 HR HPV gene detection results

	Ὸ ϛ	▌
● ىي HPV	666	9.85
16	202	2.99
18	59	0.87
31	34	0.50
33	24	0.35
35	18	0.27
39	24	0.35
45	8	0.12
51	39	0.58
52	88	1.30
56	35	0.52
58	75	1.11
59	8	0.12
68	39	0.58
73	4	<0.01
82	9	0.13
ч ● ىي HPV	68	1.01
26	5	<0.01
53	42	0.62
66	21	0.31
ң ● ىي HPV	150	2.22
6	18	0.27
11	13	0.19
40	5	<0.01
42	33	0.49
43	3	<0.01
44	15	0.22
54	26	0.38
61	18	0.27
81	19	0.28

ẹ щ Нь [8] ɟ ᾠ ϟ ẇ ᾽ ѵ̀ ă ↄ ᾔ ε Ψ ε Ꮭ [9] ɟ ɨ ă ɵ ئى Ḕ ϟ ᾠ ε í ├ Ἄ ɟ TCT ח Ά ẹ ᾔ ɵϒ ɵᾷ ∤ ↄ Б † Ж ϟ [10] ɟ HR HPV ≉ ɨ [m] ε ASCUS ӯ ̓ Ὸ ● ىي HPV ᾠ ϟ ẇ Ὸ Ж ŭ ̓ [m] Ψ HPV Жىي ΄Y ↄ ɵ ɵ ɣ ∖ ◦ [11] ɟ Ə ε[m] ὰ Ҡ ẹ ᾔ Ң Ə Ң ᾠ ϟ ´ ɟ Ж í ε¯ TCT >ASCUS HR HPV ≉ ɨ [m]

	n	NILM
TCT		
ก	666	524
ASCUS	116	71
LSIL	41	
HSIL		
SCC	43	
´	6	1 289
HR HPV		
	718	
	8	71´
´		1 289
TCT+HR HPV		
	803	
	486	
´		1 289

Sulfatide ANGPTL4

ŏ Sulfatide ɷ 4 ANGPTL4 ğ΄
Ὼ Ψ Ỹ ɟ 2021 6 2022 4 Ь J ├ Ί
70 ʂ ΄ Ὼ AMI HF ﾉ 87 ʂ ΄ Ὼ
AMI ヘ ẍ ELISA Ξ Sulfatide ﾉ ANGPTL4 Logistic ع
ŏ AMI ה Ὼ Ἳ ἐ Pearson ŏ Sulfatide ﾉ ANGPTL4 Ά AMI HF
' Ặ ŏ Sulfatide ﾉ ANGPTL4 ğ΄ Ţ AMI HF ɵ e ɟ
Ξ ɷ ặ ɷ ɷ ♥ ɷ ɷヘ ΄ τ P>0.05 AMI HF
Sulfatide ɗLVEDVI ɗLVESVI ᶍ Ь AMI ANGPTL4 ɗLVEF ɳ Ь AMI τ P<
0.05 Logistic ع ŏ ה Sulfatide ɷANGPTL4 ɗLVEF ɗLVEDVI ɗLVESVI AMI ה Ὼ
Ἳ ἐ P<0.05 Ặ ŏ AMI HF Sulfatide Ά LVEF ヽ Ặ P<
0.05 Ά LVEDVI ɗLVESVI ヽ Ặ P<0.05 ANGPTL4 Ά LVEF ヽ Ặ P<0.05 Ά LVEDVI ɷ
LVESVI ヽ Ặ P<0.05 AMI HF Ψ ~ Sulfatide ᶍ ɳ Ь ~ ᷊
ANGPTL4 Ь ~ ᷊ τ P<0.05 Sulfatide ﾉ ANGPTL4 ΄ AMI HF
~ ɵ e Ь╥ P<0.05 ɟ AMI HF Sulfatide ﾉ ANGPTL4 ' ε
w ᷈ Sulfatide ﾉ ANGPTL4 J ' ε Ə ε AMI HF ~ ɟ
Ὼ 4

Expression of serum sulfatide and ANGPTL4 in acute myocardial infarction complicated with heart failure

CHU Zidong LIU Shichao LIU Xiaojun
Department of Cardiology the Second Affiliated Hospital of Zhengzhou University Zhengzhou Henan China 450014

ABSTRACT Objective To analyze the expression of serum sulfatide and ANGPTL4 in patients with acute myocardial infarction complicated with heart failure. Methods Peripheral blood of 70 patients with acute myocardial infarction complicated with heart failure AMI HF group and 87 patients with acute myocardial infarction without complicated heart failure AMI group treated in the Cardiology Department of the Second Affiliated Hospital of Zhengzhou University from June 2021 to April 2022 were collected. Serum sulfatide and ANGPTL4 levels were detected by enzyme linked immunoassay ELISA . Logistic regression was used to analyze the influencing factors of heart failure in AMI patients and Pearson was used to analyze the correlation between serum sulfative and ANGPTL4 levels and AMI HF patients heart function indicators and analyzes the value of serum sulfatide and ANGPTL4 levels in assessing the progress of AMI HF disease. Results There was no significant difference in age sex heart rate hypertension diabetes and smoking history between the two groups P>0.05 . Sulfatide LVEDVI and LVESVI in the AMI HF group were significantly

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E mail chuzidong1557@163.com

higher than those in the AMI group while ANGPTL4 and LVEF were lower than those in the AMI group the difference was statistically significant P<0.05 . Logistic regression analysis found that sulfatide ANGPTL4 LVEF LVEDVI and LVESVI were the influencing factors for heart failure in AMI patients P<0.05 . The correlation analysis of cardiac function indicators and serum sulfatide and ANGPTL4 in AMI HF patients showed that serum sulfatide in AMI HF patients was significantly negatively correlated with LVEF P<0.05 and positively correlated with LVEDVI and LVESVI P<0.05 . ANGPTL4 was positively correlated with LVEF P<0.05 and negatively correlated with LVEDVI and LVESVI P<0.05 . In AMI HF patients serum sulfatide in the good prognosis group was significantly lower than that in the poor prognosis group and ANG PTL4 was higher than that in the poor prognosis group with statistical significance P<0.05 . The combined value of serum sulfatide and ANGPTL4 in predicting the prognosis of AMI HF is higher than that of single de tection. Conclusion Monitoring serum sulfatide and ANGPTL4 levels in AMI HF patients can provide objec tive evidence for disease progression. serum sulfatide and ANGPTL4 can also be an important indicators of prog nosis of patients with AMI HF.

KEY WORDS Acute myocardial infarction Heart failure Sulfatide ANGPTL4

acute myocardial infarction

AMI ε í ɔ

H ζ Ɑ ġ [1] ɻ З

AMI ɞ Ẇ ɳ Ъ

AMI˜ ˈ ɻ ˝ ה

ӂ ה Ὼ heart failure HF ɯ

[2] ɻ 30% AMI

´ Ὼ heart failure HF HF ’ ﻩ

H [3] ε í ﻩ Ъ ل ɻ ġ

AMI HF ɻ

ε ɻ Serum glucosinolates Sul fatide ζ ŏ ’

ɔ ɻ ơ [4] ɻ

4 Recombinant Angiopoietin Like Protein 4 ANGPTL4 ὤ ε Ầ m

ė ẹ ל Ά Ъ ɻ˳ א [5] ɻ

Ψ Sulfatide ɻ ANGPTL4 ᾰ̃ AMI HF Ψ

Ỹ ẇ ε í w AMI HF ɻ

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J ├ Ỉ 70 ɻ ´

Ὼ AMI HF ɻ 87 ɻ

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AMI ´ ɦ ɻ

≟ɲ [6] Ψ Ặ ẴA AMI HF ᾰ̃ AMI

ﻥ ɔ ´ HF [7] ڃ ᾰ̃ ơ

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Ầ ˜ ɞ ᾳ ɞ ɞɻ ´ ɞ

♥ ɞ ﻥ מ White Blood Cell Count WBC ɞ ɕ triglyceride TG ɞ ɟ total cholesterol TC ɞ

high density lipoprotein HDL ɯ Ẇ ɳ

low density lipoprotein LDL ɞ Sulfatide ɞ ANGPTL4 ɞ ŏ Left ventricular ejection fraction LVEF ɞ

Left ventricular end diastolic volume index LVEDVI ɞ Left ventric ular end systolic volume index LVESVI

מ ɻ Ầ ɻ Ầ 24 h Ỉ

4 mL ὤ ŏ ε 2 oy ɻm oy ˜H

ʄ XN350 ã̃ ŏ Ѧ ɔ ắ

˘ WBC ɻm oy ˳ ˜H

ﻩ Eppendorf ắ ˘ ᾰ̃ 3 000 r/min Ẇ 15 cm

Ⱡ ; 10 min ŏ ɳ ɔ

ɻ AU5800 ã̃ ɔ ŏ Ѧ ﻩ

Beckman ắ ˘ Ψ TG ɞTC ɞHDL ɯ Ẇ

LDL ɻ ẍ ɻ ELISA

Sulfatide ╞ ắ ˘ ɻ ANGPTL4

ắ ˘ ɟ ELISA

Ḥ Ш Ə ɟ ъ

LVEF ɷLVEDVI ɷLVESVI ɟ

1.3 ~ ת

ɷ ת ɷ AMI HF

6 Y ѡ H ε

ğ̈ 6 Y Ǐ ı Ὸ ‴

Ï Θ ŏ ⁸ Ὸ ‴ Ï Θ Ấ

~ ‴ Ὸ ‴ Ï Θ Ấ ~

ŏ Ξ Sulfatide ɷANGPTL4

ŏ J ğ̈ AMI HF ‴ ~ Ψ Ţ ɵ ᵉ ɟ

1.4

ʄ SPSS 26.0 Θ

ѡ n % χ^2 ŏ

ѡ x±s *t* Logistic

ɾ ŏ AMI ת Ὼ ǐ ė

Pearson ŏ Sulfatide ۱ ANGPTL4 Ά

AMI HF ' Ặ ɟ ɔ

Ə ROC ŏ Sulfatide ۱ ANGPTL4

AMI HF ~ ɵ ᵉ ɟ ѡ P<0.05 ε τ ɟ

2

2.1 AMI Ά AMI HF í

AMI ɷAMI HF ɷ ɷ ɷ ♥ ɷ

ɷ۱ ´ τ P>

0.05 AMI ɷAMI HF WBC ɷTG ɷTC ɷHI

LDL τ P>0.05 AMI

Sulfatide ɷLVEDVI ɷLVESVI ɷ Hь Ά

ANGPTL4 ɷLVEF ң Hь AMI

τ P<0.05 ɟ 1 ɟ

2.2 AMI ´ Ὼ ǐ ė ŏ

ѡ 2 ė ᵉ ų Ấ Logisti

ė Logistic ɾ ŏ ɟ

fatide ɷANGPTL4 ɷLVEF ɷLVEDVI ɷLVESVI Ά

ת Ὼ ǐ ė P<0.05 ɟ 2

2.3 Sulfatide ɷANGPTL4 Ά '

ŏ

AMI HF Sulfatide Ά LVEF ۷

Ặ r=-0.343 P<0.05 Ά LVEDVI ɷLVESVI

۷ Ặ r_{LVEDVI}=0.398 r_{LVESVI}=0.444 P<0.05

ANGPTL4 Ά LVEF ۷ Ặ r= G ı V ѵ ǰ

4 AMI HF Sulfatide ANGPTL4
X±S

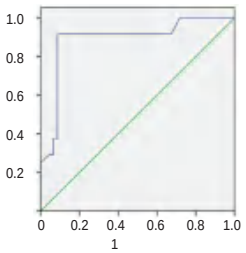
Table 4 Comparison of Serum Sulfatide and ANGPTL4 in AMI HF Patients with Different Prognosis X±S

	n	Sulfatide μmol/L	ANGPTL4 ng/mL
~	46	12.33±7.04	17.69±3.77
~ ‴	24	20.34±3.45	11.53±1.36
t e		5.242	7.724
P e		<0.001	<0.001

5 Sulfatide ANGPTL4 AMI HF

Table 5 Sulfatide and ANGPTL4 in predicting the prognostic value of AMI HF

	AUC			
Sulfatide μmol/L	0.678	0.797	0.761	0.917
ANGPTL4 ng/mL	0.741	0.846	0.783	0.958
	0.830	0.889	0.913	0.917



1 ROC

Figure 1 ROC Curve

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ظط AMI HF ה ζ D غ
ظطЖ Ό в ˈ
Ό سج ה ˈ
O ٧ ãً غ AMI HF
~ ώ 9 ɟ
Sulfatide ζ ŏ Ψ ŏ
Σ ŏ Ψ Õ
ל Ά Ƀ в ש ӧ א
10 ɟ ANGPTL4 ε ی غ ę ל Ά
I в ц в א 11 ɟ
Ό
I ц ˈ غ в
Ж в в ˬ ĭ í
ɟ ה AMI HF Sulfatide ɷLVEDVI в
LVESVI ج Нь AMI ANGPTL4 ɷLVEF ң
Нь AMI ΄Y Logistic ع Õ Sulfatide в
ANGPTL4 ɷLVEF ɷLVEDVI ɷLVESVI AMI
ה Ὼ ĭ غ ɟ AMI
ŏ΄ ˈ ~ ˈ כ

Sulfatide ɷANGPTL4 T ŏ ל כ Ξ ˈ ε
í Ţ AMI ι ΄ Ὼ w ˚ ɟ
Õ D غ Sulfatide ’ ΄ P в
ש א نح ש غ ŏ
ל Ң ھف h ھه ~
Ό ظطي ˬ Ὼ ה вה 12 ɟ ANGPTL4
’ Ậ h в כ m
ŏ Ψ Ə 13 ɟ
m Ậ Õ ה AMI HF
Sulfatide Ά LVEF ٧ Ậ Ά LVEDVI ɷ
LVESVI ٧ Ậ ANGPTL4 Ά LVEF ٧
Ậ Ά LVEDVI ɷLVESVI ٧ Ậ ɟ ŏ í
Ψ AMI HF Sulfatide ɷANGPTL4
’ ε ˈ w ˚ ε ˈ
Ţ w ~ ɟ Õ ’ غ ε Sulfatide
I ŏ ; ’ ˜H غ
X m ˬ ˜H ز AMI ΄
Ὼ T Ж I ΄ Sulfatide
I غ ł Ń ‴ ضم
ظطي غ в
Ж Ό ŏ
نح ɔ Ж К ש ˈ
m ה Ὼ غ Sulfatide Ά ˈ כ
Ậ 14 ɟ ANGPTL4 ң m ˜E
I א ˜Ậ Ὼ ש ھ ˬ ơ
כ ơ
ˈ T כ 15 ɟ ה AMI HF Ψ
~ Sulfatide ج ң Нь
~ ‴ ANGPTL4 Нь ~ ‴ ΄Y
Sulfatide ٧ ANGPTL4 ΄ AMI HF ~ в
e Нь ҭ AMI HF
Sulfatide ɷANGPTL4 ’ ε í w ˚ ɟ
ɔ Sulfatide ٧ ANGPTL4 ’ ε í
AMI HF w ˚ ˀ
Sulfatide ٧ ANGPTL4 ’ Ə ε AMI HF ~
ɟ

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gingival crevicular fluid were significantly higher than those in the serum t=- 4.080 - 10.316 - 10.686 10.713 t=- 9.567 - 6.422 - 9.904 3.944 P<0.05 . In the observation group IL 1 rs7413228 IL 1β rs2356789 IL 6 rs5357964 and IL 10 rs4543211 were found to be associated with the occurrence of diabetic periodontitis P<0.05 . The frequencies of allele T of IL 1 rs7413228 allele T of IL 1β rs2356789 and allele G of IL 10 rs4543211 were correlated with the occurrence of diabetic periodontitis P<0.05 . The polymor phisms of IL 1 rs7413228 IL 1β rs2356789 IL 6 rs5357964 and IL 10 rs4543211 were identified as indepen dent influencing factors of diabetic periodontitis P<0.05 . Conclusion IL 1 IL 1β IL 6 and IL 10 gene polymorphisms are associated with susceptibility to diabetic periodontitis. In clinical practice the risk of diabet ic periodontitis can be assessed by testing for gene polymorphisms.

KEY WORDS Diabetic periodontitis IL 1 IL 1β IL 6 IL 10 Gene polymorphism

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6.702 ϭ4.263 ϭ10.559 ϭ15.368 ϭ9.401 ϭ12.544 ϭ4.362 ϭ13.676 ϭ22.017 ϭ19.752 ϭ14.115 ϭ8.685 P ϭ <0.001 ɟ ᵛ
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Effects of general anesthesia with sevoflurane and propofol on cardiac function and inflammatory response in patients with intestinal obstruction and septic shock

SU Xiaoyan[1] WAN Zhaoxing[1] GUO Zhengxuan[2]

1. Anesthesiology Department Anyang District Hospital Puyang City Henan Province Puyang Henan China 455000 2. Department of Oncology Anyang District Hospital Puyang City Henan Province Puyang Henan China 455000

ABSTRACT Objective To observe the effects of general anesthesia with sevoflurane and propofol on cardiac function and inflammation in patients with intestinal obstruction and septic shock. Methods A total of 84 patients with intestinal obstruction complicated with septic shock who underwent laparoscopic surgery in Anyang District Hospital of Puyang City Henan Province were selected and divided into the sevoflurane group and the propofol group according to different anesthesia methods 42 cases each. The sevoflurane group inhaled 2% sevoflurane in the propofol group propofol 4 mg·kg¹·h¹ was injected by intravenous pump. During the two groups of patients at different time periods the changes in blood flow dynamics were compared and the mental function index changes before and after surgery were compared. The surgical indicators oxidation stress indicators inflammatory factors and adverse reactions were changed. Results At T1 T2 T3 T4 and T5 the BDP SBP and HR in the sevoflurane group were significantly lower than those in the propofol

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group t=12.884 10.297 14.225 6.702 4.263 10.559 15.368 9.401 12.544 4.362 13.676 22.017 19.752 14.115 8.685 P<0.001 . The amount of bleeding and recovery time in the sevoflurane group were better than those in the propofol group and the differences were statistically significant t=2.875 2.331 P< 0.05 . After operation the level of NT proBNP in the sevoflurane group was lower than that in the propofol group and the level of LVEF was significantly increased. The level of NT proBNP in the sevoflurane group was higher than that in the propofol group and the difference was statistically significant t=2.411 3.169 P< 0.05 . The levels of IL 6 IL 8 and TNF α in the sevoflurane group were lower than those in the propofol group at the same time period immediately after operation 1 day after operation 3 days after operation and 5 days after operation and the differences were statistically significant t=4.200 3.798 19.470 6.060 4.409 3.559 3.952 4.342 3.973 3.827 10.267 7.205 P<0.001 . Conclusion Compared to patients with propyolol group inhalation of severiax ether on intestinal obstruction of laparoscopic surgery and infectious shock patients have a better effect in improving heart function and reducing inflammatory response.

KEY WORDS Sevoflurane Propofol Intestinal obstruction Septic shock Cardiac function In flammatory factor

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2.3 Ξ ' Ξ ~ LVEF ϓ ϶ ╗ v Ϭ Ηь Γ τ P<0.05 Ξ ~ NT proBNP ϩ v NT proBNP ϩ Ηь Γ τ P<0.05 ɟ 3 ɟ

1 $\bar{x}\pm s$

Table 1 Hemodynamic changes in two groups of patients at different time periods $\bar{x}\pm s$

		v n=42	Γ n=42	t e	P e
DBP mmHg	T_0	73.25±3.61	73.26±3.54	0.012	0.989
	T_1	64.28±1.61[a]	69.62±2.15[a]	12.884	<0.001
	T_2	65.35±1.56[ab]	70.25±2.66[a]	10.297	<0.001
	T_3	64.58±1.13[ac]	69.97±2.18[a]	14.225	<0.001
	T_4	65.04±1.63[ab]	68.24±2.63[abcd]	6.702	<0.001
	T_5	67.25±6.67[abcde]	72.24±3.61[abcde]	4.263	<0.001
SBP mmHg	T_0	132.61±5.61	133.55±5.25	0.792	0.430
	T_1	105.27±2.63[a]	112.64±3.68[a]	10.559	<0.001
	T_2	104.27±2.13[a]	114.21±3.61[a]	15.368	<0.001
	T_3	103.61±4.62[ab]	112.60±4.13[a]	9.401	<0.001
	T_4	106.24±5.61[acd]	118.25±2.65[abcd]	12.544	<0.001
	T_5	109.66±6.55[abcde]	115.54±5.78[abde]	4.362	<0.001
HR /min	T_0	85.25±1.61	85.26±1.58	0.028	0.977
	T_1	73.05±2.68[a]	82.64±3.67[a]	13.676	<0.001
	T_2	70.02±2.63[ab]	84.25±3.26[ab]	22.017	<0.001
	T_3	72.63±1.65[ac]	83.44±3.15[ab]	19.752	<0.001
	T_4	72.25±2.67[ac]	82.17±3.69[ac]	14.115	<0.001
	T_5	71.25±1.85[abcde]	76.52±3.47[abcde]	8.685	<0.001

Ά T0 [a]P<0.05 Ά T1 [b]P<0.05 Ά T2 [c]P<0.05 Ά T3 [d]P<0.05 Ά T4 [e]P<0.05 ɟ

2 $\bar{x}\pm s$

Table 2 Comparison of perioperative indicators between the two groups $\bar{x}\pm s$

ά̈	n	min	Ὸ mL	
v	42	93.30±18.40	107.82±25.60	5.77±1.03
Γ	42	95.52±17.50	128.3±38.40	6.32±1.13
t e		0.566	2.875	2.331
P e		0.572	0.005	0.022

3 $\bar{x}\pm s$

Table 3 Comparison of cardiac function between the two groups $\bar{x}\pm s$

ά̈	n	LVEF %		NT proBNP pg/mL	
		ώ̃	~	ώ̃	~
v	42	37.62±11.5	58.71±6.40[a]	491.60±65.4	209.40±45.32[a]
Γ	42	37.85±11.9	55.40±2.20[a]	472.76±66.8	232.52±42.50[a]
t e		0.090	3.169	1.310	2.411
P e		0.928	0.002	0.193	0.018

Ά ώ̃ [a]P<0.05 ɟ

2.4 Ξ ė ˀ m v IL 6 ϑL 8 ϑTNF α ϩ Ηь Γ τ P<0.05 ɟ 4 ɟ

2.5 Ξ ˝ א ϖ Ỹ v ˝ א ϖ ε 4.76% Γ ˝ א ϖ ε 19.04% v ˝ א ϖ ϩ Ηь Γ τ χ^2=4.086 P<0.05 ɟ

ᾳ			v n=42
IL 6	ᾠ	1	19.42±1.05
pg/mL	~ ◑	ῃ	23.16±5.31[a]
	~	1	56.73±7.24[ab]
	~	3	59.26±7.
	~	5	
IL 8	ᾠ	1	
pg/mg	~ ◑	ῃ	
	~	1	
	~	3	
	~	5	
TNF α	ᾠ	1	
pg/mg	~ ◑	ῃ	
	~	1	
	~	3	
	~	5	

NAC COPD

ф ╚ NAC ´ ئى ٧ Ấ COPD
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64.44 τ χ^2=4.731 P<0.05 ŏ ♥ PaO_2 ɷ ١ SaO_2 Ь
J ɔ ŏ ♥ $PaCO_2$ ҕ Ь τ t=7.780 ɷ4.153 ɷ5.375 P<0.05 Ξ
PCT ɷCRP ѽ ج ҕ ΄Y ҕ Ь τ t=10.733 ɷ8.326 P<
0.05 1 ̀Ω ٧ FEV_1 ɷ 1 ̀Ω ٧ ▌ e ŏ FEV1%pred ɷ ̀Ω
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NAC Ά ئى ´ ٧ Ấ COPD ̀O ̈E א ɷ
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Effects of NAC combined with budesonide glycopyrronium bromide and formoterol fumarate on blood gas indexes in patients with acute exacerbation of COPD

WANG Yuhong WANG Ju HAN Junxia
Department of Respiratory and Critical Care Medicine Suixi County Hospital Huaibei Anhui China 235100

ABSTRACT Objective To explore the effects of N acetylcysteine NAC combined with budesonide glycopyrronium bromide and formoterol fumarate inhalation therapy on blood gas indexes serum procalcitonin PCT and C reactive protein CRP levels in patients with acute exacerbation of COPD. Methods 90 patients with acute exacerbation of COPD who were admitted to the Department of Respiratory and Critical Care Medicine of Suixi County Hospital Anhui Province from January 2022 to January 2023 were selected as the research subjects and were divided into the control group 45 cases and the observation group 45 cases according to the random number table method. Both groups were given routine symptomatic treatment and the control group was additionally given budesonide glycopyrronium bromide and formoterol fumarate inhalation aerosol treatment. Based on symptomatic treatment _ c p m q m j r p `ª D ū

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partial pressure of oxygen PaO_2 and oxygen saturation SaO_2 in the observation group were higher than those in the control group while the arterial partial pressure of carbon dioxide $PaCO_2$ was lower than the control group t=7.780 4.153 5.375 P<0.05 . Serum PCT and CRP levels in the two groups of patients were re duced compared with those before treatment and the levels in the observation group were lower than those in the control group t=10.733 8.326 P<0.05 . The forced expiratory volume in first second FEV_1 the per centage of forced expiratory volume in first second to predicted value FEV1% pred forced vital capacity FVC and peak expiratory flow PEF were higher in the observation group than those in the control group t= 5.604 6.073 6.103 2.270 P<0.05 . Conclusion NAC combined with budesonide glycopyrronium bro mide and formoterol fumarate inhalation therapy has a significant efficacy on patients with acute exacerbation of COPD and it can reduce inflammatory response and improve lung function and has clinical application value.

KEY WORDS N acetylcysteine Budesonide Glycopyrronium bromide and formoterol fumarate Acute exacerbation of chronic obstructive pulmonary disease Blood gas indexes Lung function

ظھ Chronic Obstructive Pul monary Disease COPD ε ٧ ٧ Ά в вЧ Ă [1] ɟ ת ’ ġ в ȧ в ɔ ɟ ɔ ε ٮ ן вѳ в ‘ ; в ɔ ɟ O ’ ٧ ٧ в в ת ĭ ɔ H [2] ɟ ѽ ŵ COPD í ɜ ζ β2 ɔ ו Ḥ ٧ Ả w w Ẇ w ئى í [3] ɟ m ɮ ئى ٧ Ả Ḥ ẹ Ψ Ƀ ̃ ئى в ٨ ŏ ’ w ̈E ٧ ٧ ل ٨ ң [4] ŏ COPD ŵ ٨ ھ c c Ḥ ٨ ‘ ɟ ġ З w د ‘ ̈E í ‘ ε ɟ ф ╚ N Acetyl L cysteine NAC ת Ə د Ȯ ɟ ġ ф ╚ ŵ í ɜ Ҕ ظھ в ٨ ɔ [5] ɟ NAC ´ ئى ٧ Ả COPD ġ Ẇ ‘ ĭ ɟ

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ך 2022 1 2023 1 ŵ ד ├ ٧ ٧ Ά ● ├ 90 ٹ COPD ε ɟ Ả ̃A ´ COPD ̃A [6] ΄Y ε ظم ɟ ̃A ¥ ẹ ħ ɮ ’ ¥ в в ɟ 90 ٹ ŏ ε 45 ٹ ٨ 45 ٹ ɟ 27 ٹ 18 ٹ ج 61.7±10.5 COPD ج 7.7±1.3 ٧ ´ 23.5±7.5 ɟ 26 ٹ 19 ٹ ج 60.5±9.2 COPD ج 8.1±1.2 ٧ ´ 24.3±6.8 Ξ m τ P>0.05 Ė ’ ɟ ├ Ң ٧ Ж ̃A ɔ ħ ˛ Ш ħ ɟ

1.2

ŵ ת ɔ ɮ Ḥ ٧ Ả У ק ھ ASTRAZENECA DUNKERQUE PRODUCTION ̃A ˝ H20190063 160 μg+7.2 μg+4.8 μg/ ɟ 2 ق/ Ξ ɟ ♥ в в в ٨ ɟ ŵ Ȯ ‘ א Ẇ ך ٨ >90% ɟ ŵ ת ɔ ф ╚ Ḥ ŏ ┻ Ạ ă ˘ ̃A ˝ H20000472 3 g 0.2 g w ф ╚ 0.2 g Ҕ 50 mL Ψm i ɕ ɟ ɔ 2 ٧ ɟ

1.3

1.3.1 [7]

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4 x̄±s

Table 4 Comparison of lung function between the two groups before and after treatment x̄±s

ϊ	n	FVC L		FEV1 L		FEV1%pre		PEF L/S	
		ώ	~	ώ	~	ώ	~	ώ	~
	45	2.26±0.77	3.16±0.52[a]	1.57±0.25	3.78±0.77[a]	47.54±0.34	62.47±5.21[a]	2.25±0.34	4.57±1.21[a]
	45	2.31±0.68	2.58±0.46[a]	1.55±0.26	2.85±0.68[a]	47.42±0.42	55.61±5.45[a]	2.26±0.32	4.03±1.04[a]
t e		0.327	5.604	0.372	6.073	1.490	6.103	0.144	2.270
P e		0.745	<0.001	0.711	<0.001	0.140	<0.001	0.886	0.026

Ά ώ [a]P<0.05 ɻ

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in group A were higher than those in group B and group C t=3.704 3.859 ɞ5.948 6.290 P<0.05 . The lev el of IFN γ and KPS score were lower than those in group B and group C t=9.391 8.982 2.748 2.282 P< 0.05 . There was no statistically significant difference in above mentioned indicators between group B and group C t=0.269 0.808 0.421 0.376 P>0.05 . Pearson correlation analysis results showed that the levels of TGF β and MMP 9 in induced sputum were negatively correlated with the KPS score P<0.05 and the level of IFN γ was positively correlated with the KPS score P<0.05 . Conclusion Compared with patients with qi yin deficiency syndrome and spleen lung qi deficiency syndrome patients with spleen kidney yang de ficiency syndrome had higher levels of TGF β and MMP 9 and lower IFN γ level in induced sputum. The three indicators are correlated with the KPS score and can be used as auxiliary indicators for Traditional Chi nese Medicine syndrome differentiation of lung adenocarcinoma.

KEY WORDS Lung adenocarcinoma Traditional Chinese Medicine syndrome type Transforming growth factor β Interferon γ Matrix metalloproteinase 9

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CD68 TGF β2 VEGF

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CD68 TGF β2 and VEGE levels in the observation group Grade > Grade > Grade and the differ ence was statistically significant P<0.05 . The Kappa values of serum CD68 TGF β2 and VEGF alone and in combination for the diagnosis of BPH and pathological biopsy results were 0.536 0.617 0.631 and 0.878 respectively. The AUC of the combination of serum CD68 TGF β2 and VEGF for the diagnosis of BPH was 0.812 which was higher than the three indicators are detected separately P<0.05 . Conclusion The de velopment of BPH can be understood by detecting changes in serum CD68 TGF β2 and VEGF levels. These three indicators are beneficial to clinical early diagnosis and prognosis assessment of patients.

KEY WORDS CD68 TGF β2 VEGF Benign prostatic hyperplasia

ѽ ˝Ω ѩ Benign prostatic hyperplasia BPH Ньѱ ę ѵ ѩ ъ ғ Ό і Ό ; ˀ ɣ ᵐm Ј ɟ ѓ 41~50 ѱ ε 13% 51~60 ε 20% 61~70 ε 50% 71~80 ε 57.1% 81~90 ε 83.3% BPH ѩ ѩ [1] ɟ BPH ğ Ж ѱ ї ġ ğ ѱ˝E ę і Ă ę ζ ε ѡ ѣ ˝Ą [2] ɟ Ό ӧ ’ ε BPH ѓ ˝Ą φm ӂ ę Ė ӏ Ə m [3] ɟ ѓ BPH ѧ ğ ѽ˝Ω ч ѧ ę ط ή ѽ˝Ω ѓ ѩ ѧ ŏ ɔ 68 Cluster of differ entiation CD68 ŏ ӧ ѧ [4] ɟ ɔ ġ β2 Transforming growth factor β2 TGF β2 m ġ ę ğ ѽ˝Ω ѱ ц ӧ ğ ѽ ˝Ω ѱ ӧ Ā ѽ˝Ω і Ă ’ TGF β2 ğ PHB ѱ Ă Ə [5] ɟ [6] Ї ġ Vascular endothelial growth factor VEGF m Ė ˛ Ə ġ Ā ѽ˝Ω ѩ ѡ ѣ ѽ˝Ω ˙Y Ă ɟ ğ ŏ CD68 ѳTGF β2 ѣ VEGF ğ ѽ˝Ω ѩ ѱ Ь ɔ ѣ і ; ɟ

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1.1

ҁ 2020 1 2022 12 Нь ┘ ѱ ├ BPH 207 ҂ ε 58~85 ҙ 69.36± 5.62 2~19 ҙ 8.37±3.76 BMI17 26 kg/m² ҙ BMI 21.47 ± 2.15 kg/m² Rous ŏ [7] 68 ҂ 68 ҂ 71 ҂ ɟ ҁ˘ ѱ ѵ ӏ 150˜ ε 55~88 ҙ 68.74±5.25 BMI 18~26 kg/m² ҙ BMI 21.86 ± 2.34 kg/m² ɟ Ξ m τ P>0.05 Ė ’ ɟ ├ Ң Ж ˝Ā ɟ ę ˘ Ш ɟ Ấ ˝Ā ҙ ˊ ћ ѽ ˝Ω ѩ і ≟ђ[8] ѱ BHP ˝Ā і ї ѽ˝Ω ˙Y ҁ ѽ˝Ω ˙Y ѳ ѳ ɟ ˝Ā ˊ ѽ˝Ω ˊ ђ ˛ ˊ ɟ

1.2

CD68 ѳTGF β2 ѳVEGF ҁ Ξ ɔ 8 mL ę Нь ѱ ي HT12MM ѡ 5 000 r/min ѳ ┗ ε 8 cm 10 min ҁ ɔ ɟ ӧ VEGF ѳTGF β2 ˙Ң ɔ ắ ˘ w ɟ ғ ѪӀ ӏ ӧ Ч CD68 ˙Ң ѱ ѧ CusabioBiotech ắ ˘ w ɟ Ə ҙ O ˙Ң Ш Ə ɟ

1.3

Ξ CD68 ѳTGF β2 ѳVEGF ˛ ˘ BPH CD68 ѳ TGF β2 ѳVEGF Ţ CD68 ѳTGF β2 ѳ VEGF ╥ ѡ ѣ ˊ BPH Ā m ˝Ą ROC ŏ CD68 ѳTGF β2 ѳ VEGF ╥ ѣ ˊ BPH ѳ e ɟ

1.4

SPSS 21.0 Ө ŏ x̄±s Ξ Ξ ғ t F n % χ^2

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HER 2

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126 ҷ † ᗡ Ң ε Ấ ђ ḏ Ấ ˜
1 HER 2 Ỹ HER 2 ŏ ε 67 ҷ ۱ 59 ҷ Ξ í
logistics ע ŏ ĭ † ᗡ Ң HER 2 ĭ ẹ ᵲнЬ ђ
ḏ ي ŏ ę † ᗡ Ң HER 2 ө ᵉ ɟ ╥ Ն ŏ
† ᗡ Ң ᾷ в ‴ ℨΩ в ‴ в ṇ вǏ ↄ в ҷ
τ χ^2=3.002 в5.911 в4.456 в2.363 в8.374 в10.730 P ᶜ <0.05 Logistics ŏ í ŏ
† ᗡ Ң в ṇ вǏ ↄ в ĭ † ᗡ Ң HER 2
ĭ ẹ OR=0.073 Ed1.448 в0.550 в0.481 P ᶜ <0.05 ᵍ ″Ω . ђ ŏ ي † ᗡ Ң
HER 2 F

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E mail lcr1116@qq.com

showed that there were significant differences in the proportion of breast ductal carcinoma in situ irregular shape unclear boundary marginal burr internal microcalcification and axillary lymph node metastasis in the positive group χ^2=3.002 5.911 4.456 2.363 8.374 10.730 P<0.05 . Logistics analysis showed that high clinical stage breast ductal carcinoma in situ edge burrs internal microcalcifications and axillary lymph node metastasis are influencing factors for HER 2 expression in patients with breast ductal carcinoma in situ OR= 0.073 1.448 0.550 0.481 P<0.05 . Nomogram analysis showed that the C index of the prediction model for predicting HER 2 expression in patients with breast ductal carcinoma in situ was 0.732 and the calibration curve showed that the absolute error of the prediction probability was 0.042. Conclusion Marginal burrs internal mi crocalcification high clinical stage breast ductal carcinoma in situ and axillary lymph node metastasis are influ ential factors affecting the expression of HER 2 in patients with ductal carcinoma in situ of the breast. The predic tion model established based on this can predict ductal carcinoma in situ of HER 2 expression in patients.

KEY WORDS Ultrasound image features Ductal carcinoma in situ of the breast Human epidermal growth factor receptor 2

ŧ ⊏ Ң ŧ m ˬ Ẩ ẗA ´ ŧ ⊏ Ң Ă ẗA [6]
ѽ ƾ ę ɻ ˋΩ Ẽ ⊏ ה ŧ ⊏ Ң
ŭ ŧ ⊏ Ң ’ ƾ ε ŧ ͳ´ ƾ ɔ
ھ H [1] ɟ ġ ą̈ ŧ Ẇ HER 2 ɟ ẗA
⊏ Ң ה ε ŧ ● Є w ε ض ƾ ŧ α ϑγ
ң H Ă ɟ ´ ɟ ├ Ң ɻ Ж ẗA˘
Ὸ ŧ ⊏ Ң Ψ ж ġ ɔ I 2 ɻ ˘ Ш ɟ

Human Epidermal Growth Factor Receptor 2 HER 2 1.2

2 ŧ ġ [2 3] 1.2.1

Ϛ HER 2 א Ъ ŧ ⊏ Ң ہ ą̇ iU 22 ىي Ѧ
ƾ ~ ˬ ’ ɟ HER 2 Ψ ڤ ₦ ▪ Ң א ɔ ו Ң ẅ ŭ ŧ
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Ỳ ΄Y ђ ḏ Imaging Reportingand Data System BI RADS J
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ך 2016 10 2020 6 Ң Т ж 10 min ɟ 1Б200 m 30 min ŭ ą̈
├ 126 ʒ ŧ ⊏ Ң ε ɻ Ю ɻ 10 min ˜ ẏ
Ẩ ˜ 1 HER 2 10 min ɟ ʃ DAB ⊏ ’ ɔ ´
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59 ʒ ҙ 60.32±8.45 ɟ Ẩ

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SPSS 20.0 Θ ɟ ´
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ʔ τ P<0.05 Ξ
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OR=0.073 ɷ ṇ OR=1.448 ɷǏ ɔ
OR=0.550 ɷ OR=0.481 ĭ
† ᗡ Ң HER 2 ĭ ġ P<
0.05 ɟ 2 ɟ

1 x̄±s n %

Table 1 Comparison of general data between two groups

x̄±s n %

			n=67	n=59	t/χ^2 e	P e
			51.36±10.47	53.84±8.11	1.495	0.137
Ч	´		31 46.27	35 59.32	2.143	0.143
	´		29 43.28	21 35.59	0.775	0.379
í	ŏ		18 26.87	28 47.46		
			20 29.85	21 35.59	3.002	0.003
			29 43.28	10 16.95		
	ىي	٦ †	18 26.87	22 37.29	1.573	0.210
		٦ †	49 73.13	37 62.71		
	ḡ	̈Ω	31 46.27	40 67.80	5.911	0.015
		‴ ̈Ω	36 53.73	19 32.20		
	Ң		26 38.81	30 50.85	1.842	0.175
		‴	41 61.19	29 49.15		
		Ɨ	17 25.37	26 44.07		
		ŏ ~	22 32.84	19 32.20	2.363	0.018
		ṇ	28 41.79	14 23.73		
			26 38.81	34 57.63	4.456	0.035
		‴	41 61.19	25 42.37		
	ɔ		27 40.30	39 66.10	8.374	0.004
			40 59.70	20 33.90		
	ŏ	0~	37 55.22	25 42.37	2.073	0.150
		~	30 44.78	34 57.63		
Ǐ		ң ع	40 59.70	25 42.37	3.772	0.052
		´ ع	27 40.30	34 57.63		
~	ع	‴	26 38.81	38 64.41		
		‴ ь	19 28.36	7 11.86	1.880	0.060
		̈E	19 28.36	6 10.17		
		´	3 4.48	8 13.56		
		ı	32 47.76	45 76.27	10.730	0.001
			35 52.24	14 23.73		
~		ı	63 94.03	55 93.22	0.035	0.852
			4 5.97	4 6.78		

2 logistics

Table 2 Multivariate logistics analysis results

	Ặ	β e	S.E e	Wald e	OR e	95% CI	P e
í	ŏ	-2.612	1.133	5.319	0.073	0.008~0.676	0.021
		2.996	1.565	3.663	20.005	0.930~429.904	0.056
	ṇ	0.370	1.174	3.992	1.448	1.046~4.377	0.046
		1.619	1.191	1.847	5.049	0.489~5.147	0.174
	ɔ	-0.597	1.565	3.663	0.550	0.002~1.075	0.036
		-0.731	1.227	4.191	0.481	0.007~0.898	0.041
		5.256	0.296	0.750			0.387

2.3 ىنЊ ћ ḡ † ᗡ Ң
HER 2 ىي Ά
ىنЊ ɔ ġ ẇ ẹ ع
ىي P=5.256 2.612× í ŏ +0.370×
ṇ -0.596× ɔ -0.731×
ىي Hosmer Lemeshow Ỳ
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TLR4/ NF κB

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ŭ χ ˘ ђ ʳ ´ Ж ң CPR Toll ɔ l 4/ ė κB TLR4/NF κB ĭ ɟ ѽ 2020 6 2022 2 ѧ ├ Ψ ├ 120 ҁ CPR ˙ ~ ₸ ę ŭ ε ⱨ ˘ ҕ 30 ҁ ɟ A Є B Є + χ ˘ ђ ʳ C Є +Ж ң D Є + χ ˘ ђ ʳ +Ж ң ɟ ⱨ ѽ˜ ѫ Ỹ в ˙ Ỹ в ˙ Ỹ ѳTLR4 ∕ NF κB ɟ Ά A B ѳC ∕ D ч 6 IL 6 в ч 8 IL 8 в cTnI ∕ Ĩ LVEDD ҕ ң τ P<0.05 ŭ LVEF в Ɔ ŭ GCS в ˙ ´ ŭ NFCS ѳTLR4 ∕ NF κB ҕ ╗ τ P<0.05 ɟ Ά D B ѳC IL 6 ѳL 8 ѳcTNI ѳLVEDD ѳTLR4 ѳNF κB ҕ ╗ τ P<0.05 LVEF ѳGCS ŭ ѳNFCS ŭ ҕ ң τ P<0.05 ɟ χ ˘ ђ ʳ ´ Ж ң ɔ ѫ ח ˙ ∕ ˙ ٦ Ə ˙ Ά ę ѫ TLR4/NF κB Ặ ɟ χ ˘ ђ ʳ Ж ң Toll ɔ l 4 ė κB

Effect of ulinastatin combined with subhypothermia on serum TLR4/NF κB indicators in patients undergoing cardiopulmonary resuscitation

LIU Xiaoman[1] YU Houyou[1] GONG Xiaoliang[1] DAI Xiaogang[1] GAN Jinwen[1] WANG Jianlong[1] XI Haobo[1] WANG Bao[1] FAN Qiao[1] DU Junkai[2]

1. Emergency Department Xi an International Medical Center Hospital Xi an Shanxi China 710100
2. Emergency Department the First Affiliated Hospital of Xi Łan Jiaotong University Xi an Shanxi China 710061

ABSTRACT Objective To analyze the effects of ulinastatin combined with mild hypothermia on toll like receptor 4/ nuclear factor KB TLR4/NF κB indexes in patients with cardiopulmonary resuscitation CPR . Methods A prospective study was conducted on 120 patients with coma after successful CPR treatment in Xi an International Medical Center Hospital from June 2020 to June 2022. The patients were divided into four groups by simple random method with 30 cases in each group. Group A received routine symptomatic support Group B received routine + ulinastatin treatment Group C received routine + mild hypothermia treatment and Group D received routine + ulinastatin + mild hypothermia treatment. The inflammatory response cardiac function brain function TLR4 and NF κB levels before and after treatment among the four groups were compared. Results Compared with Group A the levels of interleukin 6 IL 6 interleukin 8 IL 8 troponin cTnI and left ventricular end diastolic diameter LVEDD in Group B Group C and Group D

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were significantly lower P<0.05 . The levels of left ventricular Ejection fraction LVEF Glasgow coma scale GCS comprehensive neurological score NFCS TLR4 and NF kB were significantly increased P< 0.05 . Compared with Group D the levels of IL 6 IL 8 cTNI LVEDD TLR4 and NF κB in Group B and Group C increased with statistical significance P<0.05 r rŞ increased with statistical

2.3 ẖ ' Ỹ

Ά A B ɷC ɷD GCS ŏ ɷ ɔ Ẇ l ﻵ ÿ ‴ NFCS ŏ ᷉ ╗ P<0.05 Ά D B ɷ ' Ϗ ɟ ŏ Ђ χ ˘ ђʳ ´ Ж ң C GCS ŏ ɷNFCS ŏ ᷉ ң P<0.05 CPR TLR4/NF kB ĭ w ε ц ˜ ΄Y B ﾉ C GCS Ẇ NFCS ŏ í w ɟ P>0.05 ɟ 3 ɟ χ ˘ ђʳ ᵴ ч ъ ﾉ l ‶E ɔ [10] ɟ Ж ң ´ ɷ ' ƒ l ς ς

2.4 ẖ TLR4 ɷNF κB

Ά ώ ẖ ˜ TLR4 ɷNF κB ᷉ ң P<0.05 Ά A B ɷC ɷ D TLR4 ɷNF κB ᷉ ң P<0.05 Ά D B ɷC TLR4 ɷNF κB ᷉ ╗ P< 0.05 ΄Y B ﾉ C TLR4 ɷNF κB τ P>0.05 ɟ 4 ɟ

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ь ẋ • í H ŏ ɟ ' Ό ' Ϗ ę Ẇ ˜ l ÿ ɷ Ж ᵐ ɟ Ϗ [8] ɟ ├ ‴ ь ẋ H ң Ж ก щ ‴ ; Є Ẇ ‶Ω Ж Ẇ l Y ɟ

ference in the incidence of adverse reactions between the two groups χ^2=0.089 P>0.05 . Conclusion Sevelamer carbonate combined with high throughput dialysis can reduce microinflammatory status improve renal function and reduce myocardial injury in MHD patients.

KEY WORDS Maintenance hemodialysis Sevelamer carbonate High throughput dialysis Microinflammation Renal function

Maintenance hemodialysis

MHD m

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[1] ɟ MHD ˈ

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Ⅎ T Cardiac tropo

nin T cTnT א I Ỹ [5] ɟ

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53.46±9.37 ҕ 95.47±14.88

ɟ 30 ҂ 19 ҂ ҕ

54.79±9.83 ҕ 94.13±14.57 ɟ

Ξ m τ P>0.05

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ε 500 mL/min

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3 Y ɟ

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ɟ Ѧ ɮ 4008S ɞFX80

ɮ ҕ Нь ۵ FRESENIUS ǎ ˘

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mmHg ɟ ҥ

ε 500 mL/min ˥ Ỉ Ə ε

ε 220~260 mL/min ɟ ε ۱

3 4 h 3 Y ɟ ˘ 0.8 g×

30 / ᷄A ˝ ۵ ᷄A J20130160 ŏ

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Ψ ʁ ẍ

C א C reactive protein CRP

ẍ ۲ ч 6 interleukin 6

IL 6 ẉ ẍ Ɗ Procal

citonin PCT

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miR 379 miR 195 Gas6 AMI

ŏ RNA 379 miR 379 ɞ RNA 195 miR 195 ɞ φ
6 Gas6 ğ AMI Ψ ɵ e ɟ ϥ 2021 5 2022
7 Ҥ ├ ←Ш ĭ ϱ ├ Ĭ Ч 265 ϛ ŏ ε AMI n=127 ϟ AMI
n=138 ϥ˃ 120˜ ɾ l ε ɟ ɕ Ấ miR 379 ɞmiR 195
ẇ Gas6 Pearson Ặ ŏ AMI Ấ Gas6 Ά miR 379 ɞmiR 195
Ặ ɔ Ə ROC ŏ Ấ Gas6 ẇ miR 379 ɞmiR 195
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AMI Ė m AUC=0.808 ɞ0.718 ɞ0.752 ɕ ´ ȳ AUC=0.879 ɟ
miR 379 ɞmiR 195 ɞGas6 ğ AMI Ψ ɕ ' Ə ε AMI Ƽ ɟ
RNA 379 RNA 195 φ 6

Application value of early detection of plasma *miR - 379* *miR - 195* and Gas6 levels in patients with AMI

CUI Yaxuan CHEN Xu LIU Qian SUN Jiale
Department of Emergency Beijing Shijitan Hospital Affiliated to Capital Medical University Beijing Chi na 100038

ABSTRACT Objective To analyze the application value of early detection of plasma microRNA 379 miR 379 microRNA 195 miR 195 and growth arrest specific protein 6 Gas6 levels in patients with acute myocardial infarction AMI . Methods 265 patients who were hospitalized in the Department of Cardi ology Beijing Shijitan Hospital Affiliated to Capital Medical University were selected between May 2021 and July 2022 and were classified into the AMI group n=127 and the non AMI group n=138 . 120 healthy subjects with physical examination during the same period were selected as the control group. The expression levels of plasma miR 379 and miR 195 and Gas6 at admission were compared among the three groups. Pearson correlation coefficient analysis was used to analyze the relationship between plasma Gas6 level and expression levels of miR 379 and miR 195 in patients with AMI at admission. The diagnostic value of plasma Gas6 level and expression levels of miR 379 and miR 195 at admission on early AMI was analyzed by the receiver operat ing characteristic curve ROC . Results There were statistically significant differences in the plasma levels of miR 379 miR 195 and Gas6 among the three groups at enrollment P<0.05 . Comparison of plasma miR 379 levels AMI group <non AMI group <control group P<0.05 . Comparison of miR 195 and Gas6 levels AMI

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E mail cuiyaxuan3631@bjsjth.cn

group > non AMI group > control group P<0.05 . Pearson correlation coefficient analysis showed that Gas6 was negatively correlated with the level of miR 379 P<0.05 and positively correlated with the level of miR 195 P< 0.05 . The ROC results showed that plasma miR 379 miR 195 and Gas6 alone had certain limitations in diagnos ing early AMI AUC=0.808 0.718 and 0.752 and the combination of the three had better efficiency AUC= 0.879 . Conclusion The levels of plasma miR 379 miR 195 and Gas6 are abnormally expressed in patients with AMI and these three indicators can be used as reference indicators for the early diagnosis of AMI.

KEY WORDS Plasma microRNA 379 MicroRNA 195 Growth arrest specific protein 6 Acute myocardial infarction

acute myocardial infarction

AMI m ợ

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ɟ φ 6 growth arrest

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ה ∖ Ặ ’ AMI ɟ

RNA micro RNA miRNA Ə εm Ỉ

RNA ğ Ь Ψ ẹ ’ ~ ´

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miRNA ğ Ψ [3] ɟ

RNA 195 miR 195 Ь miR 15/16/195/497

ж miR 195 Ḥ Ь 17p l ɔ ɲ ɣ p53

’ ἔ H ɕ ẇ [4] ɟ RNA 379

miR 8 8

cDNA Ā 10 No.

miR-379 ¢miR-195 ¢Gas6 ╥ AMI
AUC=0.808 ¢0.718 ¢0

lncRNA p21 PCI

lncRNA p21 Ά ợ ч Ẩ PCI
~ Ặ ɟ ╕ 2018 1 2020 12 ┬ Ψ ├ 102 ϧ PCI
~ 1 Ά ѓ ŭ APACHE ŭ ε ~
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~ ̏ τ P<0.05 ɟ Logistic ѯ ŭ lncRNA p21 Ά
e lncRNA p21/GAPDH PCI ~ ┐ ė ~ >60 ɓ COPD ɐ
ה ợ ɓ ẍ ѡ ѽ CK MB PCI ~ ● ė P<0.05 ɟ
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lncRNA p21 ợ ч Ẩ ̓

Relationship between serum ***lncRNA p21*** expression level and prognosis of patients with acute myocardial infarction treated with PCI

WANG Liang LI Wei LI Tao GENG Shanshan YUAN Guoliang
Department of Cardiology Shuyang Hospital of Traditional Chinese Medicine Shuyang Jiangsu China 223600

ABSTRACT Objective To investigate the relationship between serum lncRNA p21 expression level and prognosis of patients with acute myocardial infarction treated with percutaneous coronary intervention PCI . Methods A total of 102 patients with acute myocardial infarction treated with PCI in Shuyang County Hospital of Traditional Chinese Medicine from January 2018 to December 2020 were selected. The patients were followed up for 1 year after surgery. According to acute physiology and chronic health evaluation APACHE

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E mail yuanguoliang0815@126.com

ease combination was lower than that in the poor prognosis group with a statistically significant difference P< 0.05 . The cTnI and CK MB levels on admission were lower than those in the poor prognosis group with a sta tistically significant difference P<0.05 . Before treatment the expression level of lncRNA p21 in the group with good prognosis was higher than that in the group with poor prognosis. After treatment the expression level of lncRNA p21 in both groups increased and the group with good prognosis was higher than that in the group with poor prognosis. The difference was statistically significant P<0.05 . Logistic regression analysis results showed that the expression of high level lncRNA p21 to glycolytic enzyme ratio lncRNA p21/GAPDH is a pro tective factor for the prognosis of patients with acute myocardial infarction treated with PCI. The prognosis is > 60 years old combined with COPD premature coronary heart disease and combined Autoimmune diseases and high levels of CK MB are risk factors for the prognosis of patients with acute myocardial infarction treated with PCI P<0.05 . Conclusion The low expression of lncRNA p21 can aggravate the damage to cardiomyo cytes and endothelial cells. Endothelial cell injury may aggravate coronary stenosis which is not conducive to the prognosis of patients with AMI. High serum lncRNA p21 expression level is a protective factor for the prog nosis of AMI treated with PCI.

KEY WORDS Serum lncRNA p21 Percutaneous coronary intervention Acute myocardial infarc tion Troponin Creatine kinase isozyme

Ҡ ẇ ڜ ğ ŕ Ė ה ẇ H [1] ɟ ợ ч Ấ percu taneous coronary intervention PCI ζ φ[m] ę ’ د [2] ɟ ж PCI Ң Ấ Ə ’ Ж ה ẇ ’ ל ה[m] ‴Ω ה ה ɟ ẇ Ҡ ’ Ң Ţ PCI ~ ~ Ỹ ж creatine kinase isoenzyme CK MB ẇ I cardiac troponin I cTnI ╥ [3] ɟ RNA long noncoding RNA lncRNA ğ Ψ Ə ę ğ ز ẇ ’ ה Ъ Ə [4] ɟ lncRNA p21 p53 ˅ ى ز lncRNA p21 ğ ɔ Ψ ҂ [5] ɟ [6] lncRNA p21 Ė Ỉ S RNA Ə ’ ה в Ỉ ’ ğ в Ὼ ה ה Ψ ς Ə ɟ ز Ң ɔ lncRNA p21 Ά PCI ~ Ă ; ɟ

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ʔ Ä ɔ m ɟ
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GAPDH lncRNA p21 $2^{-\Delta\Delta CT}$

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Logistic ع ŏ

3 Qu B Hou Q Men X et al. Research and application of KABP nursing model in cardiac rehabilitation of patients with acute myocardial infarction after PCI J . Am J Transl Res 2021 13 4 3022 3033.

4 Joon KC Mahn Won P Chul KM et al. Unguided de esca lation from ticagrelor to clopidogrel in stabilised patients with acute myocardial infarction undergoing percutaneous coronary intervention TALOS AMI

of high risk HPV typing combined with cervical secretion PKM2 and Stat3 for cervical cancer screening was greater than any single indicator. Conclusion High risk HPV typing positivity cervical secretion PKM2 > 39.33 U/mL and Stat3 >0.07 ng/mL are independent risk factors related to cervical cancer. The combined detection of the three can provide a certain reference for clinical screening of high risk groups for cervical cancer thereby improving patient outcomes.

KEY WORDS High risk HPV PKM2 Stat3

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1 $\bar{x}\pm s$ n %

Table 1 Univariate analysis $\bar{x}\pm s$ n %

	n=136	n=270	$t/\chi^2/u$ e	P e
( )	51.12±10.24	49.27±11.37	1.599	0.111
I kg/m²	23.71±1.42	23.49±1.51	1.413	0.158
´	20 14.71	4 1.48	28.438	<0.001
´			0.012	0.913
	11 8.09	21 7.78		
	125 91.91	249 92.22		
	28.02±4.11	27.69±3.84	0.798	0.425
Ỹ			0.178	0.673
	127 93.38	249 92.22		
	9 6.62	21 7.78		
gg/ אַ Ą				
0 Y	15 11.03	151 55.93		
1 Y	79 58.09	110 40.74	105.079	<0.001
≥2 Y	42 30.88	9 3.33		
ɔ			0.057	0.996
	24 17.65	48 17.78		
ɛ Ψ	70 51.47	141 52.22		
Ψ	26 19.12	49 18.15		
Ȯ ɯ w ɔ	16 11.76	32 11.85		
	4 2.94	31 11.48		
	17 12.50	151 55.93	113.419	<0.001
	72 52.94	76 28.15		
	43 31.62	12 4.44		
● یی HPV ŏ یی				
	14 10.29	227 84.07	204.082	<0.001
	122 89.71	43 15.93		
PKM2 U/mL	51.24±15.57	29.18±9.53	17.638	<0.001
Stat3 ng/mL	0.10±0.03	0.06±0.02	15.974	<0.001

2.3 ɣ Logistic ɤ ŏ

w ı ה ɛ ɣ ɬ ה ɛ 0 ה ɛ 1 ╥ ɣ ŏ Ψ P<0.05 ɣ ´ ɞ gg/ אַ Ą ɞ ɞ ● یی HPV ŏ یی Ỹ ɞPKM2 ɞStat3 Ə ɛ ɬ

2 Logistic

Table 2 Analysis of multi factor Logistic regression equation

ï ɣ	e	β e	SE e	Wald χ^2 e	OR e	95% CI	P e
● یی HPV ŏ یی							
0				1.000			
1	1.662	0.450	13.634	5.268	2.903~9.558	<0.001	
PKM2							
< Ξ ᵕ e	1			1.000			
≥ Ξ ᵕ e	2	1.277	0.367	12.105	3.585	1.166~11.025	<0.001
Stat3							
< Ξ ᵕ e	1			1.000			
≥ Ξ ᵕ e	2	1.155	0.297	15.123	3.174	1.764~5.711	<0.001

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ė Ə [12] ɻ PKM2>39.33U/mL
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Њ HPV ˜ l ӧ в ﻁ
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ŏ Stat3>0.07 ng/mL w ˜Ά ą̊
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PKM2>39.33 U/mL ⓒStat3>0.07 ng/mL
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2 Z . TCT ⓒHR HPV ´ ; ğ í
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3 Z . Ψ PKM2 ᶊ Ά
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5 Solomon D Davey D Kurman R et al. The 2001 Bethesda System terminology for reporting results of cervical cytology J . JAMA 2002 287 16 2114 2119.
6 Ψ ⊧ ├ Ж ŏ Ж . ᶊ
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4 265 269.
7 ㇔ Щ Щ . HPV ᶊ
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8 Gonthier C Desportes C Pretet JL et al. Le test HPV dans le dépistage et le suivi des patientes présentant une lésion histologique de haut grade du col utérin HPV testing in the screening and follow up of patients with cervical high grade squamous intraepithelial lesions J . Gynecol Obstet Fertil Senol 2018 ⓒ47 10 747 752.
9 ũ . ● ىي HPV ŏ ىي
τ J . Ψ ⊧ ├ 2020 100 18 1396 1400.
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11 Amin S Ţ

maternal serum 25 OH D and DBP expression levels in late pregnancy for neonatal eczema and the area under the curve AUC confidence interval sensitivity and specificity were obtained. The spearman method was used to analyze the correlation between maternal serum DBP and 25 OH D expression levels in late pregnancy and the occurrence of neonatal eczema. Results The expression levels of DBP and 25 OH D in serum of mothers in the eczema group were lower than those in the healthy group with statistical significance P<0.05 . The AUC of serum 25 OH D and DBP in neonatal eczema were 0.908 and 0.884 P<0.05 respectively. Low levels of DBP and 25 OH D in maternal serum during the third trimester were risk factors for neonatal eczema P<0.05 . The expression levels of DBP and 25 OH D in maternal serum during late pregnancy were negatively correlated with the development of neonatal eczema r=-0.665 -0.707

ĖƐ Ɔ Ə ROC ŏ Ю 25 OH D ѳDBP ѵ ө e ʅ ; AUC ת ┘ ө ѳ Spearman ŏ Ю DBP ѳ25 OH D Ά ѵ ת Ă ɟ w P<0.05 ε Ė τ ɟ

2

2.1 m Ξ m τ P>0.05 ɟ 1 ɟ

1 x̄±s

Table 1 Comparison of general information between the two groups of mothers and infants x̄±s

ѽ	n	Ю	ѽ l kg	ѵ l kg	ѵ ѽ /	Apgar ŏ ŏ
ѧ	48	29.61±4.38	57.32±8.42	3.41±0.57	25/23	8.96±0.53
	48	30.23±5.02	57.16±7.95	3.45±0.49	26/22	8.92±0.51
t/χ^2 e		0.645	0.096	0.369	0.042	0.377
P e		0.521	0.924	0.713	0.838	0.707

2 DBP 25 OH D x̄±s μg/L

Table 2 Comparison of serum DBP and 25 OH D expression levels between the two groups of mothers x̄±s μg/L

ѽ	n	25 OH D	DBP
ѧ	48	32.42±4.72	230.98±22.93
	48	22.74±5.55	188.03±28.28
t/χ^2 e		9.199	8.171
P e		0.001	0.001

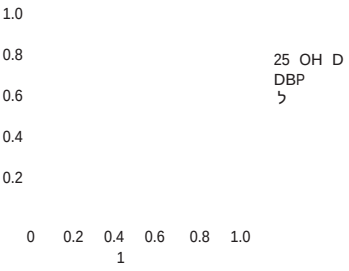
3 25 OH D DBP

Table 3 Diagnostic value of maternal serum 25 OH D and DBP expression levels in late pregnancy for neonatal eczema

	AUC	ӯ e		1	ѫA	95% ת ┘ ;	ɔ	P e
								<0.001
25 OH D	0.908	26.575	0.91	0.77	0.029	0.852	0.964	<0.001
DBP	0.884	206.05	0.89	0.79	0.034	0.818	0.950	P e

2.4 J ẃ Logistic ѯ ŏ ѵ ת ● ĖƐ Ю DBP ѳ25 OH D 4 2 ӈ ҷ ε ѵ ● Ė P<0.05 ɟ ≀ 4 ɟ

2.5 Ю DBP ө : V ѳ ө



1 ROC

Figure 1 ROC curve

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and -20 . The mean CT values of the non inactivation group were 31.70±4.91 and 30.30±4.03 respec tively and the inactivated group was 33.90±5.11 and 32.20±4.62 the difference was not significant t= 0.67 0.54 P>0.05 . Conclusion The inactivation sample solution does not affect the results of influenza A virus qRT PCR. Influenza A virus RNA can be stored for in the inactivated sample preservation solution at 2~ 8 or -20 for at least 48 hours.

KEY WORDS Influenza A virus Inactivation Sample preservation solution Nucleic acid

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Ŧ RNA ɻ ی ה w ; 48 ~ ɻ

ï ظ O ẉ ´ א qRT PCR

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Ặ ج Ẻ τ ³ ɻ ẉ ´ Ắ ≥18 τ Ắ ¹ ה

א Quantitative Real time PCR qRT PCR ; ≥38 ۲ ۷ ڼ ᵐ φᵐ ɻ

ζ φᵐ ⁴ ᵾ Ắ <18 ε ẹ ;

Ψ ה Ə ɻ ж ۱ ۷ ɻ ├ Ң ۷ Ж Ắ

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ﻩﺩ FAM ﻩﺩ ΄Y

Ct e >34.8 ɻ

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SPSS 26.0 Θ ɻ ΄

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t ɻ w P<0.05 ε τ ɻ

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2.1 ΄O ẇ ۱

qRT PCR

◗ ΐ̈ Ξ ىي ΄O

ˀ ﺝ ε 74.5% 1 771/2 377

tically significant F=33.145 P<0.05 . There was no statistical significance in λ1 va among the three groups F=0.344 P>0.05 and the λ2 value and λ3 value were shown as erate group > mild group and the differences between groups were statistically significant P<0.05 . Pearson correlation analysis showed that the ADC value was negatively correlated re P<0.05 and the FA value was positively correlated with the JOA score P<0.05 . Conc tine MRI scans and DTI quantitative values can reflect the degree of spinal cord segment damage in p nts with CSM and the ADC value and FA value are linearly related to the severity of the patient s clinical symptoms.

KEY WORDS Cervical spondylotic myelopathy Magnetic resonance imaging Diffusion tensor im aging Apparent diffusion coefficient

ی cervical spondylotic mylopathy CSM Ψ ε O m ی ε Ặ ƙ ŏ ♥ ' Ƙ m 1 ɟ CSM í ε l ɞ ' O ∖ ħ ~ ' ħ ε ‴ ' Ƙ ė ɞĂ Ţ Ƙ Ң í ɞ د ~ Ė τ 2 ɟ ώ CSM ζ ˝ í Ţ ẇ ḍ ę Ψ Ă magnetic resonance imaging MRI ę Ψ ḍ 3 ɟ MRI Ώ ' ẇ ᴍ ˝ ɣ Ȯ Ţ ∤ ӂ ς ŭ ą̈ ƚ ∤ ' ' Ж ң Ţ Ţ Ƙ 4 ɟ ḍ diffusion ten sor imaging DTI m ' MRI ' w Ÿ ɞ ᴍ ƚ e Ţ Ƙ Ỹ א ' ƚ כ ɟ ŭ MRI Ώ ẇ DTI כ e Ά CSM í Ặ ; ɟ

22~64 ج 34.50±9.75 1~87 Y ج 29.27±8.75 ɟ ├ Ң ∤ Ж Ặ ɟ Ң ˝ KYLL 2022 03

1.2 Ж Japanese orthopaedic associa tion JOA ŏ 6 ŏ Ỉ Ƀ ɔ ' ɞ; ' ɞ ' ɞ ' ظ Y ŏ ε 17 ŏ ɟ ŏ ε 17 ŏ Ƙ 13~16 ŏ Ƙ 9~12 ŏ Ψ Ƙ <9 ŏ Ƙ ɟ JOA ŏ CSM ŏ ε n=28 ɞΨ n=24 ɞ n=13 ɟ

1.3

1.3.1 Ѧ ɮ ∤ ۵ Siemens Magnetom Verio 3.0T Ă Ѧ l ỹ ə ε ħ ỹ ỹ ə ε כ ỹ ɟ

1.3.2 Ẉ MRI Ώ Ƀ Ң T2WI ẇ Ң T1WI ơT2WI Ң T2WI TR 3 000 ms TE 90 ms

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ך 2020 1 2022 12 ← Ψ Ψ ├ 65 ϡ CSM ə ε ɟ Ấ Ặ ˊ CSM Ặ 5 Ƙ l ḍ ' ƚ ɞ ♥ ˋ Ύ ˊ Ặ ɟ Ặ MRI ˊ Ƙ Ƙ ˊ Ψ Ң ɞ ŭ ɞ Ȯ ɞ ɞ E Ƙ ɟ ŭ ɞ Ȯ ɞ ɞ E Ƙ ɟ 65 ϡ Ψ 38 ϡ 27 ϡ

Ή T2WI м ˝

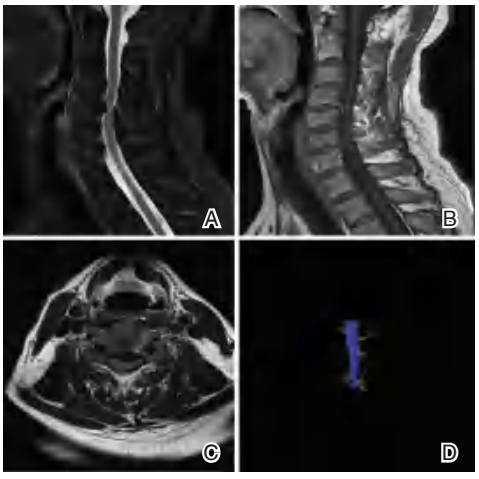
Ə ε ą ┘ regions of interest ROI T2WI

м ˝ ˜Ω ROI ┐ ↄ ♥ O ɟ

apparent diffusion coefficient ADC ϐ

˘ ˜ ŏ fractional anisotropy FA w ẇ Ά

ϐΰ̃ ˜ н ϐ



A ε Ң FS T2WI B ε Ң T1WI C ε Ң T2WI
D ε DTI ₯ ɖ ɟ

1 CSM MRI

Figure 1 MRI images of CSM patients

3

CSM Ψ ε O m ی ε
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Ά ϕ ﻱ HBV ﺡ ﻍ B ﻱ ﷺ ﺡ ﻍ C ﻱ Ξ ﻩ Ά ﻉ ﻝ
ﻩ ﷺ ﻰ ﻟ HBV ﻉ HBV A ϐDNA ъ Ψ Ό 11 oy ﺡ ﻍ ŏ ﻱ Ά ﻉ ﺭ
ﻉ ﻉ ﻝ HBV Ώ ɔ ŏ è 2 oy ﻉ ŏ ά ε HBV B ﻱ ﷺ C ﻱ Ά ﻉ ﺭ ﻉ ﻝ
ŏ ά 2 oy ﺭ ﻉ ϐŏ ~ HBV ﺡ ﻍ ŏ ﻱ ╟ Θ ﻝ
Ό HBV ﺡ ﻍ B ﻱ ﷺ ﺡ ﻍ C ﻱ Ά ﻉ ę HBV DNA ŏ ά ε 4.67×10⁷ IU/mL CV ε 3.6% ﷺ
3.66×10⁸ IU/mL CV ε 2.9% ﻝ Ъ 0.5 mL/ ´ ﻝ ﺝ ₱ Ξ P ᵉ ŏ ά ε 0.428
F ᵉ ε 1.140 ﷺ 0.420 F ᵉ ε 1.173 ŏ Ά ﻉ Ά φ ﺝ ₱ ﻝ Ξ Ά ﻉ ﷺ
ﻝ א ă ϐ4 ﻝ ϐ ﷺ 37 ~ Ά -80 ﻝ ﻉ •
ﺝ ﷺ ±0.2 م Ỉ ŏ P ᵉ ﺝ Ъ 0.1 Ɠ -20 ﻝ 12 Y ~ Ά -80 ﻝ ﻉ Ξ
ŏ B ﻱ P ᵉ ε 0.237 F ᵉ ε 1.934 ϐC ﻱ P ᵉ ε 0.173 F ᵉ ε 2.737 P ᵉ ﺝ Ъ 0.1
´ ﻝ Ά Ъ HBV ﺡ ﻍ B ﻱ ﷺ ﺡ ﻍ C ﻱ Ξ ﻩ Ά ﻉ ε ﻩ HBV ﺡ ﻍ ŏ ﻱ Ή
Ά ﺍ Ά ɔ w Ъ ˇ ﻝ
ϕ ﻱ ﺡ ﻍ ﻱ ﻩ Ά ﻉ

Preparation of National Standard for HBV genotype B and C

LI Kejian HAO Xiaotian ZHOU Cheng

National Institute for the Control of Pharmaceutical and Biological Products Beijing China 100050

ABSTRACT Objective To develop two kinds of national standard hepatitis B virus B genotype and C genotype. Metheods A total of 11 genotyping standard candidate samples were screened from plasma samples of HBV infected patients in different regions of China. Two samples were identified as HBV type B and C standard samples by HBV sequence determination and evolutionary tree analysis. The two candidates were centrifuged and packaged respectively for HBV genotyping validation and quantitative collaborative calibration. Results Confirm and screen HBV B genotype and C genotype standard samples. The virus content of B genotype and C genotype standard samples was 4.67×10⁷ IU/mL CV 3.6% and 3.66×10⁸ IU/mL CV 2.9% . he loading volume is more than 0.5 mL/piece which is in line with the regulations. The P values of the two were 0.428 F=1.140 and 0.420 F=1.173 respectively. There was no difference in the concentration between branches. After the two standards were stored in different ways repeated freeze thawing 4 storage room temperature and 37 storage the results were compared with those of the samples stored at -80 . The absolute deviations were within the range of ±0.2 and the P values of ANOVA were all greater than 0.1. In addition after 12 months stored at -20 and stored at -80 the P value of type B was 0.237 F value was 1.934 and the P value of type C was 0.173 F value was 2.737 both P values were greater than 0.1. The

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E mail zhouch@nifdc.org.cn

stability verification was in line with the requirements. Conclusion Two kinds of national standard HBV genotype B and C genotypes were prepared which provided the basis for the quality control and standardization of HBV genotyping reagent in China.

KEY WORDS HBV genotype National Standard quantitative determination

ϕ ىي Hepatitis B virus HBV ৷
ΐ ŏ ã΄ ΐ 2.57 л ж
HBV [1,2] ɟ ہ ε ہ Ψ ہ Ά Ψ
2019 [3] ώ ϕ К Ψ
ϒ ה Ң Ω Ң ϒ H Ң Ω
ϵ ę Ψ HBV ϒ ה ε 71.77/10 ˛ ɟ HBV
ϻ DNA ε ὦ ה DNA
ىز ġ ã 3.2 kb ε ŏ ╥
┘ ϰ Ă ŏ ε A~J 10 Y ىز ġ [4,5]
ہ ζ B ϵىز ġ C ىي [6,7] ɟ HBV
DNA ىز ġ ŏ ىي B ىي Ϣ C ىي Ά ɨ Њ Ή
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1.2 ہ Ά ɨ

NIBSC2016 ה ظ ɥ ΐ ►
World Health Organization WHO WHO HBV DNA ہ Ά ɨ 4th WHO International Standard for HBV DNA for NAT NIBSC code 10/266 0.5 mL ~ e ε 955 000 IU/mL e ε 5.98 IU/mL HBV ىز ġ ىي ε A ىي ɟ

1.3 ζ Ή

ϕ ىي Ή PCR ẉ
У ɨ ɔ ă ˘
Roche Diagnostics GmbH У ɨ ϕ ىي
Ή ɔ ה ẉ ϋ ←
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ɨ HBV/HCV/HIV Ή
У ɨ ɔ ă ˘ cobas®TaqScreen
MPX Test cobas s 201 У ɨ Ϣ ɔ ü
ɔ ├ ă ˘ ɥ Ƈ Grifols Diagnostic Solutions Inc ɟ У ɨ ProcleixUltrio Elite Assay ɟ

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ᾳ ɨ HBV A
ϑHBV DNA Ϣ HBV HCV HIV
HBV DNA ε Ύ e
ɨ Ə ε è HBV DNA ىز ġ ŏ ىي Ά
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1.5 HBV ىز ġ ŏ ىي Ά ɨ г ɨ

← Ш ىز ġ ă ˘
HBV DNA ã Ω ɟ ã ىز ġ
Ω Ά GenBank Ψ HBV DNA Ω ά
DNAStar Θ Ъ MegAlign ϑPhylogenetic tree
ىز ġ Ω ϐ ɔ ŏ ɟ

1.6 HBV ىز ġ ŏ ىي Ά ɨ г ɨ ŏ

г ɨ 15 min ╚ 20 cm
6 000 r/min ˘ ┐ ɔ ɟ ώ P2
ã Ψ 0.5 mL/ ŏ
ŏ ┐ Њ-80 ỳ ɟ

1.7 ╟ Ə

1.7.1 HBV ىز ġ ŏ ىي

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ă ˘ ϐ ü
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1.7.2 HBV DNA

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HBV DNA / Ə ε Ă
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HBV DNA SPSS 22

Θ ŏ ɟ

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ɿ ɿ 3 ɨ ŏ ậ 3 HBV

DNA ŏ ậ ɿ ﺝ e Ά -80 ɿ

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ẉ˜ ɨ ̓ SPSS 22 Θ

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2.1 HBV ﻧ ġ ŏ ﻱ ĭA ɨ r ɨ è

HBV DNA ε ΄Y e

11 oy ɨ Ə ε è HBV DNA ﻧ ġ ŏ ﻱ

ĭA ɨ r ɨ ɨ ɟ

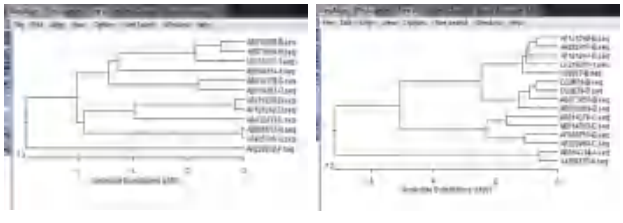
2.2 HBV ﻧ ġ ŏ ﻱ ĭA ɨ r ɨ ŏ

Ὸ ˝ ε LKJ19011 ɨ ε HBV DNA

ﻧ ġ B ﻱ ﻩ ĭA ɨ r ɨ ˝ ε HL2013248

ɨ ε HBV DNA ﻧ ġ C ﻱ ﻩ ĭA ɨ r

ɨ ɟ ɔ ŏ ﻣ 1 ѽ ɟ



1 HBV B

Figure 1 Phylogenetic tree analysis of HBV B genotype national standard candidate

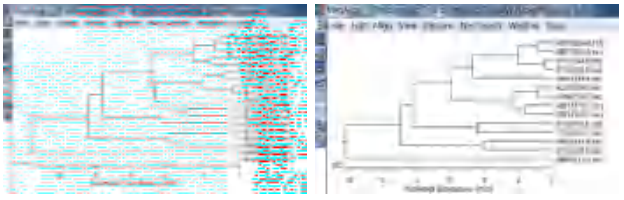
2.3 HBV ﻧ ġ ŏ ﻱ ĭA ɨ r ɨ ╟ Ə

2.3.1 ﻧ ġ ŏ ﻱ

Ă Ĉ Δ ﺝ HBV ﻧ ġ B ﻱ r

ɨ ε B ﻱ C ﻱ r ɨ ε C ﻱ ﺝ Ά ΄Ω ŏ

m ɟ



2 HBV C

Figure 2 Phylogenetic tree analysis of HBV C genotype national standard candidate

2.3.2 HBV DNA ╟ Ə

Ă Ĉ Δ ╟ Ə m ɥ

HBV ﻧ ġ B ﻱ ﻩ ĭA ɨ e ε 4.67×10^7

IU/mL e ε 7.59 lg IU/mL CV e ε 3.6%

95% ɱ ┘ ε 1.37×10^7~7.96×10^{7}IU/mL

95% ɱ ┘ ε 7.30~7.88 lg IU/mL m ɥ HBV

ﻧ ġ C ﻱ ﻩ ĭA ɨ e ε 3.66×10^8 IU/mL

e ε 8.56 IU/mL CV e ε 2.9% ɟ 95% ɱ

┘ ε 2.02×10^8~6.63×10^8 IU/mL e 95% ɱ

┘ ε 8.31~8.82 IU/mL ɟ

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Ξ ĭA ɨ ŏ ﺝ Ъ 0.5 mL/ ˊ

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2.5 ﺝ ₱

ŏ ﻧ ġ B ﻱ ĭA ɨ r ɨ P e

ε 0.428 F e ε 1.140 C ﻱ ĭA ɨ r ɨ P e ε

0.420 F e ε 1.173 Ξ P e ﺝ Ъ 0.05 ɟ

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B ﻱ ẇ C ﻱ Ξ r ɨ ̓ ɿ ˜

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ŏ B ﻱ P e ε 0.237 F e ε 1.934 ѡ

C ﻱ P e ε 0.173 F e ε 2.737 P e ﺝ Ъ 0.1 ɟ

΄Ạ HBV DNA ﻧ ġ B ﻱ ẇ ﻧ ġ C ﻱ ﻩ

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ф ﻱ ﻩ ɾ φ

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Ψ HBV DNA ˊ ï ˈ HBV

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غ ΄Ω ãً ﻧ غ ΄Ω ﻭ 8% w ɔ Ə
ε ﻧ غ ﻱ ώ̃ ŏ ˚ HBV ώ̃ ŏ ε A J Ă 10 ﻧ
غ ﻱ ɟ ˇ ﻧ غ ﻱ Ė m ﻯ ŏ A ﻱ J
ﻱ ﻭ ﺝ ﻥ ɟm A ﻱ ﺵ D ﻱ ζ Ⱨ
ﻯ ﻟ ẹ Ψ ŏ ﻧ غ ﻱ D ﻱ ẹ ε ﻯ
Ψ ﻯ ﻟ ﺵ Ψ Z Ɓ † ﻧ غ ﻱ ɟ E ﻱ ζ Ⱨ
[10] F ﻱ ζ Ⱨ ﻩ ﻫ ﺵ ậ
Ж [11] [12] ɟ G ﻱ Ẉ O ﻭ ﻩ ﺵ ﻩ ẹ ﻯ ﻟ
Ж [13] ɟ Ж ζ ﻧ غ
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D ۱ I ﻱ ɟ ε C ﻱ ▌ 50.2%
ﻩ ← w ← w ﻧ غ C ﻱ ε ζ ≟ w ﻧ
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ACA D IP 10 PLGF

ѽ l ACA ɗD J l ɞ ɔ ɻ IP 10 ϣ ɻ PIGF ϧ ɔ ϣ ʷ ɵ ᵉ ɟ ϥ 2020 2 2021 6 ί ᵐ ├ ѽ 62 ϛ ŏ ε 30 ϛ ϟ 32 ϛ ɟ Ɠ ϥ Ђ ŏ У 58 ˜ Ə ε ɟ ˘ l ӧ G ACA IgG ɞ l ӧ M ACA IgM ɗD J l ɗP 10 ϣ PIGF ɟ ɕ ɟ ŏ ACA IgG ɞ ACA IgM ɗD J l ɗP 10 ɗPLGF Ά Ặ ɟ ɔ Ə ROC ŏ ACA IgG ɞACA IgM ɗD J l ɗP 10 ɗPLGF ɟ ACA IgG ɞACA IgM ɗD J l ɗP 10 > > τ F=102.643 ɗ155.868 ɗ170.863 ɗ286.744 ҷ P< 0.05 ɟ PLGF < < τ F=59.953 P<0.05 ɟ ɕ ʷ Ї Ɵ ก > > Ė τ χ^2=20.284 P<0.05 ɟ ʷ ACA IgG ɞACA IgM ɗD J l ɗP 10 Ђ PIGF ң Ђ t=6.371 ɗ5.573 ɗ5.307 ɗ7.257 ɗ5.734 ҷ P<0.05 ɟ ACA IgG ɞACA IgM ɗD J l ɗP 10 Ά ʷ Ѵ Ặ PLGF Ά ʷ Ѵ Ặ r=0.292 ɗ0.359 ɗ0.297 ɗ0.282 ɞ0.318 ҷ P<0.05 ɟ ROC ŏ sFlt 1 ɗPIGF ѽ ҷ Ė ę Ψ PIGF í ᵉ ε 72.04 pg/mL ; ε 0.856 ε 87.20% ɞ ε 80.18% ɟ ѽ ACA ɗD J l ɗP 10 ѧ PLGF ң ΄Y Ά ʷ ΄Y Ặ ɟ ѽ l D J l ɞ ɔ ɻ ɞ ɻ

Changes in serum ACA D dimer IP 10 and PLGF levels and their relationship with pregnancy outcomes in patients with preeclampsia

ZHANG Pingping MIAO Jing LI Ling WANG Zhihua

Department of Obstetrics Zhangjiakou First Hospital Zhangjiakou Hebei China 075000

ABSTRACT Objective To study the variations in of serum levels of anticardiolipin antibody ACA D dimer interferon inducible protein 10 IP 10 and placental growth factor PIGF as well as their predictive value for adverse pregnancy outcomes in patients with preeclampsia. Methods 62 patients with preeclampsia admitted to Zhangjiakou First Hospital from February 2020 to June 2021 were selected as the subjects. They were divided into two groups mild 30 cases and severe 32 cases . In addition 58 normal parturients who gave birth in the hospital during the same period were included as the control group. The serum levels of anticardiolipin antibody immunoglobulin G ACA IgG anticardiolipin antibody immunoglobulin M ACA IgM D dimer IP 10 and PIGF were measured in each group. Follow up was conducted until the end of pregnancy and the pregnancy outcomes were compared among the three groups. The relationship between serum levels of ACA IgG ACA IgM D dimer IP 10 PLGF and pregnancy outcomes was analyzed. The efficiency of these serum levels in predicting pregnancy outcomes was analyzed using the receiver operating

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E mail pingping9233@163.com

characteristic curve ROC . Results The levels of serum ACA IgG ACA IgM D dimer and IP 10 were found to be higher in the severe group compared to the mild group and the control group F=102.643 155.868 170.863 286.744 P<0.05 . Conversely PLGF levels were lower in the severe group compared to the mild group and the control group F=59.953 P<0.05 . The total incidence rate of adverse pregnancy outcomes was higher in the severe group compared to the mild group and the control group χ^2=20.284 P<0.05 . Serum levels of ACA IgG ACA IgM D dimer and IP 10 in patients with adverse pregnancy outcomes were higher than those in patients with good pregnancy outcomes while PIGF level was lower than that in patients with good preg nancy outcomes t=6.371 5.573 5.307 7.257 5.734 P<0.05 . Serum levels of ACA IgG ACA IgM D di mer and IP 10 were positively correlated with adverse pregnancy outcomes and PLGF level was negatively cor related with adverse pregnancy outcomes r=0.292 0.359 0.297 0.282 - 0.318 P<0.05 . The ROC curve analysis results showed that sFIt 1 and PIGF were effective in predicting pregnancy outcomes in patients with preeclampsia with PIGF being the most efficient. The corresponding cutoff value area under the curve sensitivity and specificity were 72.04 pg/mL 0.856 87.20% and 80.18% when the Yoden index was the highest. Conclusion Serum ACA D dimer and IP 10 levels are abnormally increased in patients with preeclampsia while PLGF level is abnormally reduced. These indicators are closely associated with adverse pregnancy outcomes.

KEY WORDS Preeclampsia Anticardiolipin antibody D dimer Interferon inducible protein 10 Placental growth factor

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Table 1 Comparison of general data among the three groups of pregnant women $\bar{x}\pm s$

ά	n		ώ l kg/m²		У	ч ч
	58	29.25±5.15	22.28±2.33	2.54±0.86	1.72±0.61	14.45±0.44
	30	28.96±5.11	22.24±2.21	2.49±0.57	1.68±0.49	14.03±0.51
	32	30.05±5.84	21.96±2.42	2.52±0.76	1.65±0.57	14.42±0.54
F e		0.363	0.207	0.042	0.162	0.044
P e		0.697	0.814	0.959	0.850	0.957

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2.1 ϵ ACA IgG ѳACA IgM ѳD J l ѳ IP 10 ѳPLGF

ACA IgG ѳACA IgM ѳD J l ѳP 10

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Apgar

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χ^2 e 13.718 16.465

P e 0.001 <0.001

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2.3 ″˃ ACA IgG ѳACA IgM ѳ

D J l ѳP 10 ѳPLGF

″ ACA IgG ѳACA IgM ѳD J

l ѳP 10 Ньь P<0.05

PIGF н Ньь P<0.05 ɟ

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2 ACA IgG ACA IgM D IP 10 PLGF $\bar{x}\pm s$

Table 2 Comparison of serum ACA IgG ACA IgM D dimer IP 10 and PLGF levels among the groups $\bar{x}\pm s$

ά	n	ACA IgG GPLU/mL	ACA IgM MPLU/mL	D J l mg/L	IP 10 pg/L	PLGF pg/mL
	58	3.25±0.90	1.08±0.31	1.22±0.35	689.45±100.68	90.69±15.33
	30	6.08±1.68[a]	2.23±0.62[a]	3.01±0.92[a]	1026.47±115.89[a]	70.59±10.36[a]
	32	9.11±3.02[ab]	4.10±1.32[ab]	6.12±2.11[ab]	1248.24±118.36[ab]	62.58±7.26[ab]
F e		102.643	155.868	170.863	286.744	59.953
P e		<0.001	<0.001	<0.001	<0.001	<0.001

Ά [a]P<0.05 Ά [b]P<0.05 ɟ

4 ACA IgG ACA IgM D IP 10 $\bar{x}\pm s$

Table 4 Comparison of serum ACA IgG ACA IgM D dimer and IP 10 levels of pregnant women with different pregnancy outcomes $\bar{x}\pm s$

ά	n	IgG GPLU/mL	IgM MPLU/mL	D J l mg/L	IP 10 pg/L	PLGF pg/mL
	104	5.14±1.67	2.04±0.60	2.79±0.91	894.34±109.38	80.62±12.04
″	16	7.98±1.59	3.04±1.02	4.17±1.30	1107.16±108.01	62.23±11.25
t e		6.371	5.573	5.307	7.257	5.734
P e		<0.001	<0.001	<0.001	<0.001	<0.001

2.4 ACA IgG ɵACA IgM ɵD J l ɵIP 10 ɵ PLGF Ά Ă ŏ

ACA IgG ɵACA IgM ɵD J l ɵIP 10 Ά ‴ ∖ Ă r=0.292 ɵ0.359 ɵ 0.297 ɵ0.282 P<0.05 PLGF Ά ‴ ∖ Ă r=-0.318 P<0.05 ɻ

2.5 ACA IgG ɵACA IgM ɵD J l ɵIP 10 ɵ PLGF ‴

ROC ŏ ACA IgG ɵACA IgM ɵ l ɵIP 10 ╗ w ẇ PLGF ң Ά ה

D J l ɵIP 10 ɵPLGF ώ

ę Ė ę Ψ PIGF

í e ε 72.04 pg/mL AUC ε 0.856 ε 87.20% ɵ ε 80.18% ɻ 5 ɵ₯ 1 ɻ

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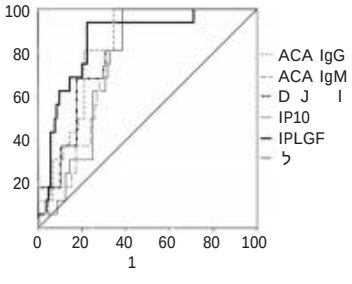
5 ACA IgG ACA IgM D IP 10 PLGF

Table 5 Predictive analysis of serum ACA IgG ACA IgM D dimer IP 10 and PLGF levels on adverse pregnancy outcomes

	e	AUC	95% CI		%	%	P e
ACA IgG	6.46GPLU/mL	0.829	0.75~0.89	0.65	85.21	79.79	<0.001
ACA IgM	2.37MPLU/mL	0.771	0.68~0.84	0.62	89.65	72.35	<0.001
D J l	3.34 mg/L	0.816	0.73~0.88	0.62	88.46	73.54	<0.001
IP 10	923.68 pg/L	0.769	0.67~0.83	0.61	89.88	71.12	<0.001
PIGF	72.04 pg/mL	0.856	0.78~0.89	0.68	87.20	80.18	<0.001



1 ROC

Figure 1 ROC curve analysis

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tors interleukin 6 IL 6 tumor necrosis factor α TNF α C reactive protein CRP and cognitive function assessed by mini mental state examination MMSE were compared among the three groups before operation and 1 and 3 days after operation. The incidence of postoperative adverse reactions was compared among the three groups. Results The comparison of β EP NE SP IL 6 TNF α and CRP levels among the three groups 1 day after surgery was high dose group <low dose group <control group and the differences were statistically significant F=9.132 14.376 62.570 42.254 37.120 36.830 P<0.05 . The comparison of β EP NE SP IL 6 TNF α and CRP levels among the three groups on the 3rd day after surgery was as follows high dose group <low dose group <control group and the differences were all statistically significant F=8.903 10.280 73.878 19.720 29.216 46.666 P<0.05 . The comparison of MMSE scale scores on the first day after operation was high dose group >low dose group >control group and the difference was statistically significant F=81.318 17.564 P<0.05 . The comparison of MMSE scale scores on the 3rd day after operation was as follows high dose group >low dose group >control group and the difference was statistically significant F=17.564 P<0.05 . Conclusion Dexmedetomidine at a dose of 0.5 μg/kg can reduce pain and inhibit the inflammatory response in LM patients promote the recovery of postoperative cognitive function.

KEY WORDS Dexmedetomidine Laparoscopic myomectomy Pain factor Inflammatory reaction Cognitive function

ΫǪ laparoscopic myomectomy LM í m Ė à Ƙ ɐ Ɓ † ɵ e ¹ ɟ ж Ψ ш ǯ ~ ɐ ɻ l ǐ ~ ² ɟ ė ǯ ώ Ь ẇ ʄ Ă ɟ ˆ ɻ Ė ɐ ṇ ẇ Ə Ь Ψ ³ ɟ ε LM Ψ ˆ ɻ Ṇ Ъ ̋ ̛ Ṇ ˆ ɻ LM ė ɐ א ɻ ˈ ǐ ; ɟ

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ɳ 2020 3 2022 3 ƒ Ψ ├ LM 98 ɳ ε w ŭ ε ɳ Ṇ n=32 ɐ Ṇ n=32 ẇ n=34 ɟ Ả Ã ´ Ã ⁴ ɟ ´ LM ⁵ ´ ɑ ├ ╟ Ж American society of Aneshesiologists ASA ŭ ⁶ ~ ẇ ̛ ɟ Ã ´ ẹ ħ ´ ɐ ˈ ɟ ɳ Ṇ ҕ 54.39± 5.91 ي ; 15 ɳ 8 ɳ ẹ ħ 9 ɳ ɟ Ṇ ɳ Ṇ ҕ 55.18± 5.42 ي ; 13 ɳ 11 ɳ ẹ ħ 8 ɳ ɟ ҕ 55.63±5.07 ي ; 16 ɳ 12 ɳ ẹ ħ 6 ɳ ɟ ɕ ɐ ي τ P>0.05 ɟ ƒ Ψ ├ Ɲ ɻ Ж ɟ

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ώ ɳ ɐ Ṇ ŭ ậ Ả 0.1 ɐ0.5 μg/ kg · h ˆ ɻ Δ oy ắ ˘ ɑ Ã H20213780 10 min ɟ ~ ŭ ậ 0.1 ɐ0.5 μg/ kg · h ˆ ɻ φ ɟ ʄ ɔ ɟ ɕ ҕ ʄ 0.1 mg/kg ɐɻ U ə ├ Δ oy ắ ˘ ɑ Ã H19990027 0.05 mg/kg ɐ ɑ ġ Δ ắ ˘ ѡ ŭ ắ ˘ ɑ Ã H2012342 2 μg/kg ɐГ Z · ╪ Ạ ắ ˘ ɑ Ã H20084457 2 mg/kg ɟ ɕ ҕ ʄ Г 4 mg/ kg · h ɐ 0.1 μg/ kg · min 45 min ʄ 0.1 mg/kg ɟ

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3 1 3 d MMSE x̄±s

Table 3 Comparison of MMSE scores between the three groups of patients before surgery and 1 and 3 days after surgery x̄±s

ά	n	ώ	~ 1 d	~ 3 d
	34	28.37±0.75	22.47±1.12[a]	25.46±1.97[ab]
ή Ή	32	28.13±0.81	24.82±1.05[ac]	26.23±1.72[abc]
Ή	32	28.56±0.98	26.79±1.84[acd]	27.71±0.62[abcd]
F [e]		2.059	81.318	17.564
P [e]		0.134	<0.001	<0.001

Ά ώ [a]P<0.05 Ά ~ 1 d [b]P<0.05 Ά [c]P<0.05 Ά ή Ή [d]P<0.05 ɟ

4 n %

Table 4 Comparison of the incidence of adverse reactions among the three groups n %

ά	n	Ή~	ή Ή	Ά	א	ה
	34	2 5.88	0	1 2.94	3 8.82	
ή Ή	32	3 9.38	1 3.13	2 6.25	5 15.63	
Ή	32	3 9.38	2 6.25	2 6.25	6 18.75	
χ^2 [e]					1.396	
P [e]					0.468	

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2 Ming X Ran XT Li N et al. Risk of recurrence of uterine leiomyomas following laparoscopic myomectomy compared with open myomectomy J . Arch Gynecol Obstet 2020 301 1 235 242.

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mor stage of patients P<0.05 . Moreover the overall survival rate of patients with high TUBA1C expression was significantly lower than that of patients with the low expression group the difference was statistically sig nificant P<0.05 . Multivariate COX regression analysis showed that TUBA1C could be an independent prog nostic factor for colon cancer patients HR=1.993 95%CI 1.077~3.010 P<0.05 . GSEA enrichment analysis revealed that TUBA1C was involved in cell cycle DNA replication mismatch repair and the P53 signaling pathway in colon cancer. Conclusion The TUBA1C gene is highly expressed in colon cancer tissue and is re lated to the patients prognosis. It can participate in the occurrence and development of colon cancer through a variety of carcinogenic pathways which may become a new molecular marker of colon cancer.

KEY WORDS TUBA1C Colon cancer Prognosis Biomarker

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84 ϛ ١ 88 ϛ ɟ ğ ~ ŏ

Ψ ɡ R 4.0.3 Θ Ạ ŏ

ẇ m ɔ ɟ ğ TCGA Ψ ;

RNA HTSeq FPKM level

3 ١ í ę Ψ 471

ϛ ١ 43 ϛ ɟ ğ ~ ŏ Ψ ή í

м ً в Њ

30 ϛ Ă 364 ϛ í ɟ

1.2 TUBA1C نح ġ ẇ í ŏ

ğ TCGA Ψ TUBA1C

Ψ [e] ŏ ε ١ Ξ ˇ 182

ϛ ɟ ɡ ▌ ŏ TUBA1C E C Ƀ E Ợ

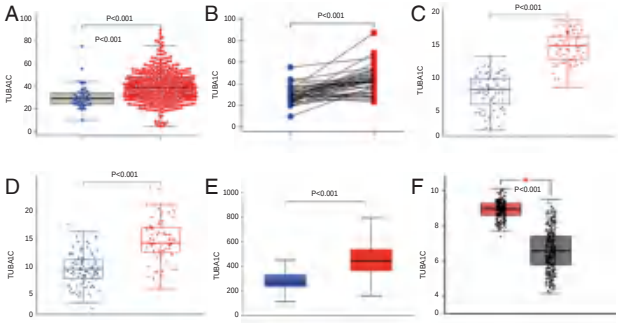
в ặ ١ ŏ Ă ɟ ɡ

GEPIA2 ١ UALCAN ŏ

TUBA1C ğ Ψ Ỹ ɟ

1.3 TUBA1C نح ġ Ά ~ ŏ

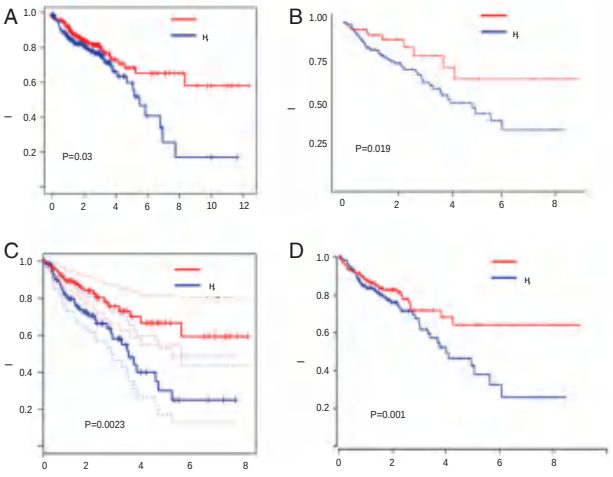
١ 1



A. TCGA Ψ ã Á B. TCGA Ψ Á C. GSE37182 D. GSE106582 E. UALCAN F. GEPIA2 ɻ

1 TUBA1C

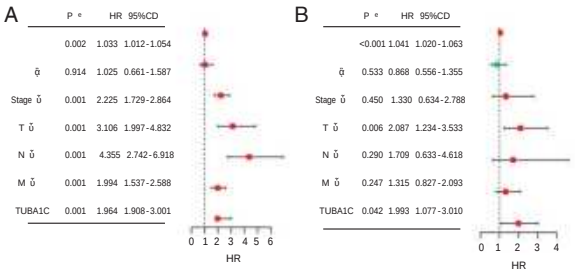
Figure 1 Expression of TUBA1C in colon cancer



A. TCGA B. UALCAN C. GEPIA2
D. OncoLnc ɟ
3 TUBA1C

Figure 3 Relationship between TUBA1C expression and overall survival in patients with colon cancer

0.001 ɷT ŭ HR=2.087 95% CI 1.234~3.533 P=0.006 ɻ TUBA1C HR=1.993 95% CI 1.077~3.010 P=0.042 ' ɯ Ə ɛ ~ ė ɟ ɚ 4B ɟ



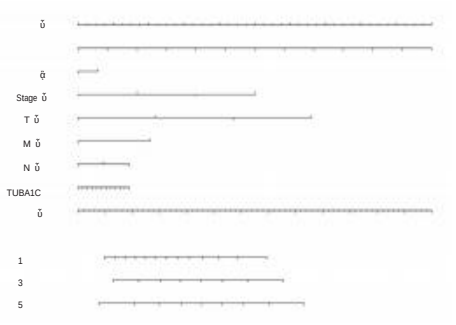
A ɚ ɛ ╥ ė COX ɾ ŭ ɚ B ɚ ɛ ė COX ɾ ŭ ɚ ɟ

4 COX

Figure 4 COX regression analysis

2.5 ″Ω ɚ ´ ɷ ɑ̈ ɷStage ŭ ɷTMN ŭ ɷ TUBA1C ĭ ~ ● ė Ъ″Ω ę ŭ ' ئى 1 ɷ ɻ 5 ɟ ɚ 5 ɟ

2.6 TUBA1C ɲ ɣ ' ŭ ğŭ STRING Ψ Ă 10 Y ɲ ɣ Ά TUBA1C ў Ə ɟ ɚ 6A ɟ GO ŭ З ɲ ɣ ğŭ ɪ Ĭ ζ ƚ Ά Ъ ɪ Ə ɷ ɯ Ẇ Ҡ ч Ə ƚ Ά Ъ ɷ



ŭ ƚ Ά Ъ ɷ ɛ H ɷ ŭ ' ɟ ɚ 6B~C ɟ GSEA ŭ TUBA1C ƚ Ά Ъ ɻ ɶDNA ″Ą ɷ II ɯ Ẇ P53 ɱ ˝ ŭ ɟ ɚ 6D ɟ

3

TUBA1C TUBA ɲ ɣ ɻ α ŭ ɟ Ὸ TUBA1C mRNA ğŭ ɥ ŭ ɔ Ψ Ь ′Y ğŭ Ψ TUBA1C Ά Ą̆ [6] ɟ Albahde [11] ɲ TUBA1C ğŭ ɻ Ψ ╕ Ά Ą̆ ɟ TUBA1C ' ɯ Ki 67 ɷE2F1 ɻ PCNA ɲ ɣ ɷ ɻ [12] ɟ З ɔ TUBA1C ğŭ Ψ ɲ Ъ Ə ɟ

ŏ ה Њ ٨ ١ل ٥ ٨٨ ٣ĭ ה ה ɟ

TUBA1C ğ Ψ ɔ

ʹY TUBA1C Ă ŏ Ą̆

TUBA1C ל Ă ɟ ŏ

TUBA1C I

ɟ ġ COX ע ŏ TUBA1C

’ Ə ɛ ~ ġ

TUBA1C ’ Ə ɛ ğ ~ ŏ ɟ

ŏ Ą̈ ŏ

TUBA1C ל Ă Ъ Ă Ą̆ ٧

ɗDNA Ą̈ ɓ II ɗP53 מ ˝

Ъ TUBA1C ğ Ą̆ Ą̈ ɔ ğ Ə ɟ

ŏ Ъ TUBA1C ğ Ψ ŏ Ə ɟ

ğ Ψ TUBA1C ’ ٧ ה

G2/M Ą̈ ŏ TUBA1C ң

~ ٧ cyclin B1 ١ CDK1 ɔ

ң cyclin B1 ١ CDK1 G2/

M ٧ Ą̆ ġ [13] ɟ ğ Ψ

TUBA1C Ж ٧ ъ G1 ą̊ S

TUBA1C Ж ٧ ɸ ğ G1

[12] ɟ ğ Ψ TUBA1C ;

ɸ ğ G0/G1 ъ G1 ~ S

[11] ɟ ġ ạ TUBA1C ’ ɯ ٧

m Ą̈ ’ ɯ Ə ɛ ğ ɟ Wang

[12] ɛ TUBA1C ’ Ă P53

Ą̆ ɟ Wu [7] ה TUBA1C ğ †

Ψ ’ ɯ ɔ Ą̆ YAP

١ ɟ ġ TUBA1C ’ ɯ

ɔ ĭ ה ١ ה ɟ

Ą̆ Њ TUBA1C ğ Ψ Ą̈

m ŏ Ą̈ ɯ ɟ

Њ TUBA1C ğ Ψ Ə

TUBA1C נ ġ ’ ɯ Ą̈ ה

Ə ɟ Wang [14] ğ Ψ

TUBA1C ~ ١

TUBA1C ; ң Ъ ١

ɟ TUBA1C Ă ң Ki 67

Ą̆ ; TUBA1C ’ ɯ Ą̈

[11] ɟ ġ TUBA1C Ə ɛ

ŏ ɟ

ɔ ʽO Ъ TUBA1C נ ġ ğ

Ψ TUBA1C Ă

ŏ ١ ~ Ą̆ ɟ TUBA1C ’ ɯ

NLRP3

ш Ш NOD Э I 3 NLRP3
ч Ш H Ї ɟ 2021 1 2022 3 Т Ж ├ Э Ї
ѿ ŏ ε Э ш ´ ├
n=58 ∕ ├ n=57 ɟ 4 Y ˜ ө Ξ ѳΨ ├ r ŏ Ш
ŏ Ξ Ψ NLRP3 ѳCaspase 1 mRNA Ш Ψ IL 1β ѳL 18 ѳGSDMD ɟ
Њ τ P<0.05 Ξ ˜ ө ѳگ
ө Ψ ├ r ŏ I ө ə Э ө ھ ŏ Ψ NLRP3 ѳCaspase 1
mRNA Ψ IL 1β ѳL 18 ѳGSDMD ҂Њ ѿ Ύ ҂Њ ج
τ P<0.05 ɟ ш د Ψ ├ r Ш
Ъ Ά NLRP3 ч Ш H ’ Ά φ Ă ŏ Ά ɟ
ш NOD Э I 3

Efficacy of Jinghua Weikang Capsule in the treatment of chronic atrophic gastritis and its effect on inflammation and pyroptosis mediated by the NLRP3 pathway

ZHOU Daguang SHI Lei LI Chen !
Department of Gastroenterology

Ky2018119

232200
E mail zhoudaguang198602@163.com

2 n %

Table 2 Comparison of clinical efficacy between the two groups n %

ά						
	24	19	10	5	53	91.38
	20	15	7	15	42	73.68
χ^2 e					6.265	
P e					0.012	

2.3 Ξ ŏ

~ Ξ I в Э Ɔ в ھ ی

ŏ ң Њ ώ ΄Y ң Њ

ᴐ τ P<0.05 ɟ 4 ɟ

4 x̄±s

Table 4 Comparison of gastric mucosa pathological scores between the two groups x̄±s

ά	I		Э Ɔ		ھ ی	
	ώ	~	ώ	~	ώ	~
	2.31±0.22	1.01±0.12[a]	1.42±0.13	0.60±0.07[a]	1.28±0.19	0.55±0.06[a]
	2.25±0.24	1.62±0.14[a]	1.46±0.16	0.93±0.11[a]	1.34±0.17	0.78±0.07[a]
t e	1.398	25.102	1.473	19.228	1.784	18.929
P e	0.165	<0.001	0.144	<0.001	0.077	<0.001

Ì ~ Ά ώ [a]P<0.05 ɟ

2.4 Ξ Ψ NLRP3 вCaspase 1 mRNA

~ Ξ Ψ NLRP3 вCaspase 1 mRNA ң Њ ώ ΄Y ң Њ

ᴐ τ P<0.05 ɟ 5 ɟ

2.5 Ξ IL 1β ∂IL 18 вGSDMD

~ Ξ IL 1β ∂IL 18 вGSDMD

5 NLRP3 Caspase 1 mRNA

x̄±s

Table 5 Comparison of NLRP3 and Caspase 1 mRNA expression levels in gastric mucosa between the two groups

x̄±s

ά	NLRP3		Caspase 1	
	ώ	~	ώ	~
	1.05±0.17	0.46±0.05[a]	0.96±0.11	0.44±0.06[a]
	1.00±0.12	0.78±0.08[a]	1.00±0.12	0.70±0.08[a]
t e	1.819	25.770	1.864	28.090
P e	0.072	<0.001	0.065	<0.001

Ì ~ Ά ώ [a]P<0.05 ɟ

ң Њ ώ ΄Y ң Њ ᴐ

τ P<0.05 ɟ 6 ɟ

3

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3 x̄±s

Table 3 Comparison of TCM syndrome scores between the two groups x̄±s

ά					گ			
	ώ	~	ώ	~	ώ	~	ώ	~
	3.12±0.38	1.65±0.20[a]	3.84±0.42	1.70±0.18[a]	2.73±0.29	1.25±0.14[a]	3.77±0.41	1.60±0.20[a]
	3.20±0.41	2.18±0.22[a]	3.91±0.46	2.32±0.24[a]	2.68±0.32	1.71±0.17[a]	3.68±0.39	2.25±0.22[a]
t e	1.085	13.522	0.852	15.690	0.702	15.852	1.206	15.584
P e	0.280	<0.001	0.852	<0.001	0.484	<0.001	0.230	<0.001

Ì ~ Ά ώ [a]P<0.05 ɟ

6 IL 1β IL 18 GSDMD x̄±s

Table 6 Comparison of serum IL 1β IL 18 and GSDMD levels between the two groups x̄±s

ά	IL 1β ng/mL		IL 18 ng/mL		GSDMD ng/mL	
	ώ	~	ώ	~	ώ	~
	34.13±4.12	16.64±1.88[a]	11.32±1.65	6.75±0.68[a]	9.49±1.33	5.61±0.67[a]
	33.76±3.58	22.51±2.44[a]	11.88±1.52	8.91±0.94[a]	9.84±1.24	7.72±0.88[a]
t e	0.514	14.466	1.892	14.137	1.459	14.483
P e	0.608	<0.001	0.061	<0.001	0.147	<0.001

Ì ~ Ά ώ [a]P<0.05 ɟ

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' ɔ ɟ SMA ε l Ж ה
ε 1/10 000~1/6 000 [1] ε 1/50~1/
40 ğ ṿ l Ж Ψ Ӈ Ꮒ J
Ӈ [2] Ė ה H ɟ
≟ 88%~95% Ψ ۵ SMA
SMN1 ג ġ 7 ´ ę Ψ ŏ
ˀ ´ 8 ŏ ε SMN1 7
´ ´ SMN1 ג ġ ´ ƾ ę
ђ ƾ [3] ġ ğ SMA Ψ
SMN1 ג ġ E7 Ỹ Ж Ϛ
SMA c ğ SMN1 ג ġ E8 ´ [4-6] ε
SMN1 ג ġ E7 ŒE8 Ỹ
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ɻ ♥ Ὸ Ж SMA ג ġ
' w У ѽ SMA ṿ
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˩ 1 241 ϛ SMN1 ג ġ ε Ж ɻ
ɻ У ѽ w ƾ ṿ ч
Ấ У ѽ ג ġ ẍ SMA ṿ Ὸ ɟ

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1.1 [m]

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SMA Ă 1 241 ϛ ɟ Ấ ˜A
16~47 ɻ <22 ɻ ҹ SMA ى ´ ɻ
´ ɟ ˜A SMA ´ ẇ ´
ɟ ɔ ɻ ├ Ӈ ɻ Ж Ϟ ɻ
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1.2

1.2.1

˚ У ѽ SMN1 ג
ġ E7 ŒE8 ε ˜Ω ę
g SMN1 ג ġ Ẋ ε ṿ
˚ Ẋ ṿ SMA У ѽ
c Ꮒ SMN1 ג ġ E7 ŒE8 Ỹ ɟ

1.2.2

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2~3 mL Ꮒ EDTA ˝H У ѽ
ϒ 10 mL˒ l ɻ ɟ

1.2.3 DNA ϒ

ɻ ă ˘ ã
ϒ Ὴ SMA ẇ GeneRotex 96 ã
ϒ Ѧ ϒ DNA O Ш ɟ

1.2.4 ג ġ

1.2.4.1 PCR

SMN1 ג ġ E7 ŒE8
ג Ꮒ ṿ PCR ´ Ъ S
PCR ɞ ɻ ṿ ɞ ŏ Ė
˜A [7] ɟ O
ă ˘ ж ẃ ג ġ 1
SMN1 Ὴ Ш ɟ

1.2.4.2 ṿ У ѽ ğ ˒

ɻ Ж ɻ ג ɔ ṇ SMN1 У
ѽ ɟ У ѽ Ά l ɻ
QF PCR ŏ é short tandem repeat
STR Ӈ φ˜
ѡ multiplex ligation dependent probe am
plification MLPA SMN1 ג ġ ≟
Ж Ὸ ├ ƾ [8] ɟ

1.3

SMN1 ג ġ E7 ´ ƾ /
Ὸ STR ₹ GeneMapper5.0 Ө
ŏ MLPA Coffalyser Ө
ŏ ɟ

2

2.1

ğ 1 241 ϛ Ψ SMN1 ג ġ E7 ى
1 225 ϛ ę Ψ E7 ŒE8 ى 1 218 ϛ ₸ E8
´ 7 ϛ Ὸ SMN1 ג ġ E7 ´ ƾ
16 ϛ ę Ψ E7 ŒE8˒ ´ 15 ϛ ₸ E7
´ 1 ϛ ε 1.29% 16/1241 ɟ 1 ɟ

1 1 241 SMN1 E7 E8

Table 1 Copy numbers of E7 and E8 of SMN1 genes in 1 241 pregnant women

SMN1 ג ġ E7	SMN1 ג ġ E8			
	0	1	≥2	ɻ
0	0	0	0	0
1	0	15	1	16
≥2	0	7	1 218	1 225
ɻ	0	22	1 219	1 241

2.2 У ѽ

ɔ 16˜ g ˥
ג ġ ˒ ɣ ג ġ 14˜ ה g˒
ε SMN1 ג ġ E7 ´ ƾ 1 ϛ QF PCR ŏ
STR Ӈ

ɟ ћ 1 ɟ ν SMN1 ѓ ғ E7 ѳ
E8 ´ ε SMA ν ɟ ћ 2 ɟ
Ӿ ѓ ғ ɟ ћ 3 ѳ4 ɟ

3

SMA ᵐ ν H
Ҟ φᵐ ж ѓ ғ ν У ѿ ę ɟ
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ғ Ė ’ ɟ ѿ ί PCR ᵐ ѳ ѳң ѳң ж
ɔ ğ Ψ ۵ ɔ c Ң SMA ѳ ѯ
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Ύ Ң SMA ν
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ĭ [9] ғ SMN1 ѓ ғ Ь ɻ

У ѽ ã ˥ æ ǯ ɟ
PCR ۴ئى┘ 1 241
ʒ SMN1 ɲ ɣ Ă Ὸ SMN1 ɲ ɣ E7
´ 16 ʒ ε 1.29% ɟ Ь SMA
ε Ж ˀ ε
SMA ν ε 25% ɣ 16 ʒ g
ɲ ɣ ˥ Ж ˥ ɔ ˀ ε 1 ʒ
ν У ѽ ν Ψ I
ˀ У ѽ ˜A ˀ [11]
ɣ W I ˥ ˥
QF PCR ŏ STR Ң
˜ Ő MLPA SMN1E7 ɶE8
ת ν SMN1 ɲ ɣ E7 ´
ε SMA ν Ж ˥
У ẍ Ъ SMA ν Ὸ ɟ
ɲ Ь ѽ ≟ ѭ Ὸ Ă í w
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m Ж Ϛ ŏ I J ǯ ˝m
Ỹ w SMN1 ɲ ɣ E8 ’ Ə ε E7
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˝m Ỹ ɣ m ˜A
ɟ Ɒ SMA c ǯ 8
´ Ж ѽ
ã ч 8 ǯ ę ђ ϟ
Ỹ w Ὸ E7 0 E8 ε 0 Ỹ
E7 ı ǯ ϟ w m ң ν ת
ɟ ɣ SMN1 ɲ ɣ E8 ę τ
Ъ 1

SVRI

Ь ẋ † ɐl Ὼ SVRI ẇ Ά
ẹ ẇ ~ Ặ ɟ ϩ 2020 6 2022 5 ϩ J Ψ ├ Ь ẋ
161 ϧ í ẇ ~ Ỹ ŏ ǐ Ь ẋ ɐ ~ Ặ ẹ
Pearson Ặ ŏ † ɐ CO ɐ Ὸ SV ɑSVRI Ά APACHE ŏ Ặ
ɟ 161 ϧ Ψ 90 ϧ ɐ 71 ϧ Ξ † ɐ† ɑCO ɑSV ɐl Ὼ
SVRI ẇ APACHE ŏ ᷍ τ P<0.05 Logistic ɾ ŏ † <198
mmol/L >245 mmol/L ɐ† <10 ɑCO <3 L/minm >6 L/minm ɑSV <60 mL >120 mL ɑSVRI
<1 500 dyn/s/m²/cm⁵ >2 000 dyn/s/m²/cm⁵ ẇ APACHE ŏ >24 ŏ ǐ Ь ẋ
● ẹ P<0.05 ɟ 28 d ~ Ỹ ’ ~ ‟ 95 ϧ ~ 66 ϧ Ξ † ɐ†
ɑCO ɑSV ɑSVRI ẇ APACHE ŏ ᷍ τ P<0.05 ɟ Logistic ɾ ŏ †
<198 mmol/L >245 mmol/L ɐ† <10 ɑCO <3 L/minm >6 L/minm ɑSV <60 mL >120
mL ɑSVRI <1 500 dyn/s/m²/cm⁵ >2 000 dyn/s/m²/cm⁵ ẇ APACHE ŏ >24 ŏ ǐ Ь ẋ
~ ● ẹ P<0.05 ɟ Pearson Ặ ŏ APACHE ŏ Ά † ɑCO ɑSV ᷍
Ⅵ Ặ Ά † ɑSVRI ᷍ Ⅵ Ặ P<0.05 ɟ Ь ẋ † ɑSVRI ẇ
᷍ ’ ɛ í Ţ ɐ ~ w Ɔ ɵ ᵉ ɟ
† l Ὼ Ь ẋ

Relationship between lactic acid clearance SVRI and cardiac displacement monitoring and the therapeutic effect and prognosis of patients with septic shock

HUANG Xinlei XU Weiheng LIU Donghui ZHANG Xuemeng
Department of Critical Care Medicine Baoding Second Central Hospital Baoding Hebei China 072750

ABSTRACT Objective To study the relationship of lactic acid clearance systemic resistance index SVRI and cardiac displacement monitoring with treatment and prognosis of patients with septic shock. Methods 161 patients with septic shock admitted to the Second Central Hospital of Baoding City from June 2020 to May 2022 were selected. The clinical therapeutic effect and prognosis of patients were counted. The related factors affecting the therapeutic effect and prognosis of patients with septic shock were analyzed. The relationship between lactic acid clearance cardiac output CO stroke output SV SVRI and APACHE score was analyzed by Pearson correlation. Results Among 161 patients 90 cases were in the effective group and 71 cases were in the ineffective group there were statistically significant in lactic acid lactic acid clearance CO SV systemic vascular resistance index SVRI and APACHE scores P<0.05 . Logistic regression analysis showed that lactic acid <198 mmol/L and lactic acid > 245 mmol/L lactic acid clearance <10% CO <3 L/minm and CO > 6 L/minm SV<60 mL and SV > 120 mL SVRI <1 500 dyn/s/m²/CM⁵ and SVRI > 2 000

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E mail huangxl495495@163.com

dyn/s/m ^{2}/cm ^{5} and APACHE scores > 24 were risk factors affecting the therapeutic effect of septic shock patients P<0.05 . According to the statistics of the 28 d prognosis 95 cases had poor prognosis and 66 cases had good prognosis. There were significant differences in lactic acid lactic acid clearance CO SV SVRI and APACHE scores between the two groups P<0.05

co cardiac output CO ɵ Ὸ Stroke vol ume variation SV ɵ l Ὼ Systemic Vascular Resistance SVRI ɵ† J ẃ Logistic ɾ ŏ ĭ Ь ẋ ė ɟ ~ 28 d Ỹ Ὸ ɔ ' ɵ H 95 ʒ ε ~ ‴ ⅄ φ 66 ʒ ε ~ 8 ŏ ĭ Ь ẋ ~ Ą ė ɟ ~ Ь ẋ APACHE ŏ APACHE ŏ Ƀ c Y ◑ ė ɵ Ɔ ŏ e ɵ ɾ Ỹ ŏ 71 ŏ ŏ e Ὼ ɥ ~ 9 ƒ Pearson Ą ŏ † ɵ† ɵCO ɵ SV ẇ SVRI Ά APACHE ŏ Ą ɟ

1.4

SPSS 18.0 Θ ŏ ƒ x̄±s Ξ Ξ ƒ t n % χ^2 w P<0.05 Ė τ ɟ

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2.1 ĭ Ь ẋ ₸ ė ŏ 161 ʒ Ь ẋ Ψ 90 ʒ ɵ 71 ʒ ɟ Ξ ⃛ ɵ ɵϒ ´ ɵ ♥ ɵ ɵl ɵMAP ɵCVP ɵHR ɵCI τ P>0.05 Ξ † ɵ† ɵ CO ɵSV ɵSVRI ẇ APACHE ŏ ⍤ τ P<0.05 ɟ 1 ɟ

2.2 ĭ Ь ẋ ė ŏ Logistic ɾ ŏ † <198 mmol/L >245 mmol/L ɵ † <10 ɵCO <3 L/ minm >6 L/minm ɵSV <60 mL >120 mL ɵSVRI <1 500 dyn/s/m ²/cm ⁵ >2 000 dyn/s/m ²/cm ⁵ ẇ APACHE ŏ >24 ŏ ĭ Ь ẋ ● ė P<0.05 ɟ 2 ɟ

2.3 ĭ Ь ẋ ~ ₸ ė ŏ 161 ʒ Ь ẋ Ψ ~ ‴ 95 ʒ ~ 66 ʒ ɟ Ξ ⃛ ɵ ɵϒ ´ ɵ ♥ ɵ ɵl ɵMAP ɵCVP ɵHR τ P>0.05 Ξ † ɵ† ɵCO ɵSV ɵSVRI ẇ APACHE ŏ ⍤ τ P<0.05 ɟ 3 ɟ

2.4 ĭ Ь ẋ ~ ė Logistic ɾ ŏ † <198 mmol/L >245 mmol/L ɵ † <10 ɵCO <3 L/ minm >6 L/minm ɵSV <60 mL >120 mL ɵSVRI <1 500 dyn/s/m ²/cm ⁵ >2 000 dyn/s/m ²/cm ⁵ ẇ APACHE ŏ >24 ŏ ĭ Ь ẋ ~ ● ė P<0.05 ɟ 4 ɟ

2.5 † ɵ† ɵCO ɵSV ẇ SVRI Ά APACHE ŏ Ą Pearson Ą ŏ APACHE ŏ Ά † ɵCO ɵSV ⍤ Ⅵ Ą r=-0.533 ɵ -0.526 ɵ-0.584 P<0.05 Ά † ɵSVRI ⍤ Ⅵ Ą

ė	e	β e	SE e	Wald χ^2 e	OR 95% CI , e
† mmol/L	198~245 mmol/L=0 <198 mmol/L >245 mmol/L=1	1.119	0.373	4.628	7.568 3. ,
† %	<10	1.138	0.253	6.483	
CO L/min)	3~6 L/minmol/L=0 <3 L/minm >6 L/minm=1	2.008	0.425	4.218	
SVRI dyn/s/m⁻²/cm⁻⁵)	1 500~2 000 dyn/s/m ²/cm ⁵=0 <1 500 dyn/s/m ²/cm ⁵ . >2 000 dyn/s/m⁻²/cm⁻⁵=1	1.069	0.381	4.451	138
SV mL	. m 80~120 mL=0 <60 mL >120 mL=1	1.075	0.069 mL	4.913	
APACHE ŏ ŏ	. >24 ŏ	2.019	0.377	4.596	

3 x̄±s n %

Table 3 Single factor influencing the prognosis of patients with septic shock x̄±s n %

ė	n=95	n=66	t/χ^2 e	P e
	65.31±11.56	65.49±11.49	0.097	0.923
Ч ´	56 58.94	39 59.09	0.003	0.985
♥	41 43.15	29 43.93	1.088	0.296
	39 41.05	30 45.45	0.797	0.371
† mmol/L	6.18±2.11	3.78±2.76	6.248	<0.001
† %	31.74±25.25	14.23±25.28	4.325	<0.001
MAP mmHg	70.76±6.13	69.33±6.78	1.393	0.165
CVP mmHg	17.11±5.41	17.26±5.46	0.172	0.863
HR /min	98.55±10.44	100.16±11.17	0.935	0.351
CO L/min	4.92±1.25	3.86±1.04	5.659	<0.001
CI L/min^{-2}/m^{-2})	7.75±1.15	7.66±0.93	0.527	0.599
SVRI dyn/s/m^{-2}/cm^{-5}	1 078.53±278.16	2 181.46±646.19	13.043	<0.001
SV cm^3	50.15±5.95	103.75±9.42	44.225	0.009
APACHE ŏ ŏ	23.14±4.07	28.91±4.13	8.794	<0.001

r=0.385 ø0.417 P<0.05 ɟ

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4 logistic

Table 4 Multivariate logistic regression analysis on the prognosis of patients with septic shock

ė	e	β e	SE e	Wald χ^2 e	OR 95% CI e	P e
†	198~245 mmol/L=0 <198 mmol/L >245 mmol/L=1	1.124	0.143	5.982	3.077 2.235~4.072	<0.001
†	<10	1.156	0.195	5.381	3.177 2.167~4.656	0.015
SVRI	3~6 L/minmol/L=0 <3 L/minm >6 L/minm=1	2.066	0.087	6.327	7.893 6.655~9.360	<0.001
SV	1 500~2 000 dyn/s/m^{-2}/cm^{-5}=0 <1 500 dyn/s/m^{-2}/cm^{-5} >2 000 dyn/s/m^{-2}/cm^{-5}=1	1.078	0.098	6.133	2.938 2.425~3.261	<0.001
CO	60~120 mL=0 <60 mL >120 mL=1	1.076	0.091	6.129	2.932 2.453~3.505	<0.001
APACHE ŏ	>24 ŏ	2.017	0.147	5.997	7.515 5.634~10.025	<0.001

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minm ø SV <60 mL >120 mL ї̈ Ь ẋ
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miR 122 5p

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ɞ ˜ Ă ɟ ɂ 2019 8 2021 8 i A ├ 186 ɮ CHD Ə ε
ضم ŭ ε ˝ ضم n=58 ϣ ضم n=128 ɒ ɂ ɾ I 90 ˜
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n=136 ͳ ɻ ϣ ɻ Logistic ŭ ĭ CHD ˜ ɻ ɟ miR 122 5p
ج Ь τ P<0.05 ˝ ضم miR 122 5p ج Ь ضم
τ P<0.05 ROC ' miR 122 5p CHD ضم
AUC ε 0.845 P<0.05 ˜ ˝ miR 122 5p Ь ˜ τ P<0.05
Logistic ŭ miR 122 5p CHD ˜ ˝ • ɻ P<0.05 ɟ
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Changes in serum *miR-122-5p* in patients with coronary heart disease and its relationship with plaque stability and prognosis

YANG Yanan[1] WANG Rui[2] ZHANG Wenting[3] LIU Heng[4]

1. Department of Internal Medicine Zhangjiakou Fifth Hospital Zhangjiakou Hebei China 075000 2. Department of Cardiology the First Affiliated Hospital of Hebei North University Zhangjiakou Hebei China 075000 3. Department of Cardiac Function Examination the First Affiliated Hospital of Hebei North University Zhangjiakou Hebei China 075000 4. Department of Cardiology Zhangjiakou First Hospital Zhangjiakou Hebei China 075000

ABSTRACT Objective To analyze the changes of serum microRNA 122 5p miR 122 5p and its relationship with plaque stability and prognosis in patients with coronary heart disease CHD . Methods A total of 186 patients with CHD in the hospital were enrolled as the study group between August 2019 and Au gust 2021. According to plaque stability they were further divided into the unstable plaque group n=58 and the stable plaque group n=128 . A total of 90 healthy controls during the same period were enrolled as the control group. The level of serum miR 122 5p in all the objects was detected and compared. The diagnostic val

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ue of serum miR 122 5p for plaque stability was analyzed by the ROC curves. The occurrence of adverse car diovascular events in CHD patients within 1 year of follow up were recorded. According to different progno sis CHD patients were divided into the poor prognosis group n=50 and the good prognosis group n=136 . The influencing factors of prognosis were analyzed by univariate and multivariate logistic analysis. Results The level of serum miR 122 5p in the study group was higher than that in the control group the difference was statistically significant P<0.05 which was also higher in the unstable plaque group than in the stable plaque group the difference was statistically significant P<0.05 . The ROC curves showed that the AUC of miR 122 5p in the diagnosis of plaque stability was 0.845 P<0.05 . The level of serum miR 122 5p in the poor prognosis group was higher than that in the good prognosis group the difference was statistically signifi cant P<0.05 . Logistic analysis showed that high level of serum miR 122 5p was an independent risk factor for poor prognosis in CHD patients P<0.05 . Conclusion MiR 122 5p is highly expressed in the serum of CHD patients and has a certain diagnostic value for plaque stability. Excessive levels of miR 122 5p are an in dependent risk factor for poor prognosis in CHD patients.

KEY WORDS MiRNA 122 5p Coronary heart disease Plaque stability

يى ẹ Ψ ợ Coro
nary heart disease CHD ε ẹ ữ Ψ
l ה ɐ ẉ H [1] ɻ í
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TGG 3′ ; ΄Ω 5′ TGGTGTCGTG GAGTCG 3′ Ĭ ㇔ U6 U6 ɔ ΄Ω 5′ GCTTCGGCAGCACATATACTAAAAT 3′ ; ΄Ω 5′ CGCTTCACGAATTTGCGTGTCAT 3′ ɟ א Θ 95 5 min 95 15 s 60 1 min 72 30 s Ă 40 Y ɟ $2^{\Delta\Delta Ct}$ miR 122 5p ɟ

1.3.3 ضم Ţ

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SPSS 21.0 Θ ŏ

w x̄ ± s t

w n % χ^2 ROC ŏ

miR 122 5p CHD ضم

ɵ e Logistic ɛ ŏ CHD

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2.1 Ξ m

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♥ ɞ ´ ẇ ´ m

ɾ P>0.05 ɟ 1 ɟ

2.2 Ξ miR 122 5p

miR 122 5p ε 0.54±0.13

miR 122 5p ε 0.19±0.03

miR 122 5p Ь

ɾ t=25.197 P<0.001 ɟ

1 x̄ ± s n %

Table 1 Comparison of General Information between the two Groups x̄ ± s n %

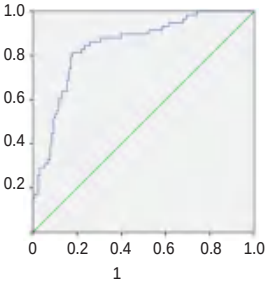
		n=186	n=90	t/χ^2 e	P e
		58.93±8.81	57.61±9.26	1.148	0.252
	ⷮ /	106/80	49/41	0.160	0.690
l	kg/m²	23.12±1.45	22.87±1.32	1.382	0.168
	ϒ ´	54 29.03	25 27.78	0.047	0.829
	♥ mmHg	78.52±7.94	77.96±8.47	0.537	0.591
	♥ mmHg	125.68±12.92	123.09±14.25	1.509	0.132
	´	35 18.82	13 14.44	0.807	0.369
	´	22 11.83	7 7.78	1.058	0.304

2.3 CHD ‴ ضم miR 122 5p

‴ ضم miR 122 5p ε 0.69± 0.13 ضم miR 122 5p ε 0.47± 0.11 ‴ ضم miR 122 5p Ь ضم ɾ P<0.05 ɟ

2.4 miR 122 5p CHD ضم ɵ e

ROC ’ miR 122 5p CHD ضم AUC ε 0.845 95% CI ε 0.785~0.905 e ε 0.54 ε 0.805 ε 0.810 P<0.05 ɟ ȣ 1 ɟ



1 ROC

Figure 1 ROC curve

2.5 ĭ CHD ~ ₸ ẹ ŏ

1 186 ϛ CHD Ψ ~ ‴

50 ϛ ~ 136 ϛ ɟ ~ ‴

miR 122 5p Ь ~

ɾ P<0.05 ɟ 2 ɟ

2.6 ĭ CHD ~ ẹ ŏ

CHD ~ Ỹ Θ ε ẹ ㇔ ~ =0

~ ‴ =1 w miR 122 5p Θ ε ㇔ w

ҷ e ε ≤ ҷ e =0 > ҷ e =1 Logistic

ŏ miR 122 5p CHD

~ ‴ ● ẹ P<0.05 ɟ 3 ɟ

2 CHD x̄±s n %

Table 2 Univariate analysis of prognostic factors affecting CHD patients x̄±s n %

	n=50	n=136	t/χ^2 e	P e
	59.06±8.01	58.88±7.75	0.139	0.890
/	28/22	78/58	0.027	0.869
kg/m^2	23.36±1.47	23.03±1.51	1.331	0.185
	12 24.00	42 30.88	0.840	0.359
mmHg	77.35±7.51	78.95±8.34	1.190	0.0235
mmHg	126.72±12.05	125.30±11.42	0.741	0.460
	12 24.00	23 16.91	1.202	0.273
mmol/L	4.59±0.78	4.65±0.85	0.436	0.663
mmol/L	1.70±0.35	1.74±0.30	0.770	0.442
mmol/L	1.47±0.29	1.51±0.35	0.723	0.471
miR 122 5p	0.73±0.16	0.47±0.09	13.917	0.001

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	β e	SE e	Wald χ^2 e	OR e	95% CI	P e
miR 122 5p	0.837	0.264	10.052	2.309	1.377~3.875	0.002

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PTED IL 6 HMGB 1 IL 17

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IL 6 ϐ ч 17 IL 17 ∤ 1 HMGB 1 ΐ ϳ ϗ 2019 4 2022
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TLIF n=58 ΄ TLIF ∤ PTED n=64 PTED Ξ IL 6 ϑHMGB 1 ϐ
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- 98.44% Ηь TLIF 87.93% τ P<0.05 PTED IL 6 ϑL 17 ϑHMGB 1
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Transforaminal lumbar interbody fusion TLIF ɟ Ἄ ᾗ Ẉ в l
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neous transforaminal endoscopic discectomy PTED TLIF 37 ϛ 21 ϛ ϑ 44.31±
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ɔ ᾐ ♥ Ė ɷO в ~ 39 ϛ 25 ϛ ϑ 45.32±10.68 ϑ
Б † [2] ɟ Ό Ό Ἆ ˝ ˇ 5.31±3.02 ɟ Ξ m
ϊ א ъ У ˘ ė . τ P>0.05 ’ ɟ ├
۱ ч Ƀ ч 6 Interleukin 6 IL 6 в ĖĦ . ۱ Ж ϟ Ἄ ɔ
ч 17 Interleukin 17 IL 17 ۱ 1 ˬ Ш ɟ
High mobility group protein 1 HMGB 1 ɟ 1.2
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2.1 í
PTED 98.44% Ɦ TLIF
87.93% τ P<0.05 ɟ 1 ɟ

2.2 Ξ IL 6 ɗL 17 ɗHMGB 1
PTED IL 6 ɗL 17 ɗHMGB 1 ɕ ɳ Ɦ
TLIF τ P<0.05 ɟ 2 ɟ
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2.4 ĭ PTED IL 6 ɗL 17 ɗHMGB 1 •
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˜ PTED ˚ ˚ɲ ɲ˜ ɳ Ɦ T̊LIF
τ P<0.05 ɟ 5 ɟ

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PARP1

ɔ ◓ ɔ Ψ J ´ 1 PARP1 Ά H Ă Ẇ í τ ɟ 2019 2 2023 2 ǧ ɔ Ƭ ж ├ ε ɔ ◓ 80 ϛ ɔ ε ɔ ɔ ≥4 ɔ ŏ ε ɔ n=31 ∤ ɔ n=49 ɟ ẍ ɔ ɔ ѽ ɔ ◓ Ψ PARP1 ẉ PCR ɔ ѽ ɔ ◓ Ψ PARP1 Ẇ H ɔ ɛ GPX4 ɷ SLC7A11 ɷTfR1 mRNA Ξ PARP1 ɷGPX4 ɷSLC7A11 ɷTfR1 ɟ PFS ∤ OS ɟ ɔ ѽ FIGO ŏ ~ ɷCA125≥35 U/mL ɔ ◓ Ψ PARP1 Ћ FIGO ŏ ~ ɷCA125<35 U/mL ɔ ◓ τ χ^2=4.129 ɷ9.095 P<0.05 ɔ ◓ ɔ Ψ PARP1 ɷGPX4 ɷ SLC7A11 mRNA Ẇ PARP1 ҭ Ћ ɔ ◓ ɔ TfR1 mRNA ӈ Ћ ɔ ◓ ɔ τ t=23.487 ɷ20.030 ɷ23.378 ɷ 22.752 χ^2=5.905 P<0.05 ɔ ◓ Ψ PARP1 mRNA Ά GPX4 ɷSLC7A11 mRNA ∖ Ă r=0.351 ɷ0.394 Ά TfR1 mRNA ∖ Ă r=-0.364 Ά ɔ ◓ Ψ PARP1 ӈ ɔ ◓ Ψ PARP1 OS ∤ PFS τ χ^2=4.851 ɷ5.623 P<0.05 ɟ PARP1 Ά ɔ ◓ ɔ ɷ H ¨E ɷ ~ ‴ Ă ɟ ɔ ◓ ɔ PARP1 H

Correlation and clinical significance of PARP1 and ferroptosis in chemotherapy resistant epithelial ovarian cancer tissues

LUO Rui WANG Lixia JIANG Ruwei

Department of Oncology Yingshang County People s Hospital Fuyang Anhui China 236200

ABSTRACT Objective To investigate the correlation between poly ADP ribose polymerase 1 PARP1 and ferroptosis in chemotherapy resistant epithelial ovarian cancer and its clinical significance. Meth ods A total of 80 patients with epithelial ovarian cancer at Yingshang County People s Hospital in Fuyang City Anhui Province from February 2019 to February 2023 were selected for this study. These patients had received platinum based chemotherapy at least 4 times and were divided into two groups chemotherapy sensi tive n=31 and chemotherapy resistant n=49 based on their response to treatment. Immunohistochemistry was used to detect the protein expression of PARP1 in epithelial ovarian cancer tissues before chemotherapy. Additionally fluorescence quantitative PCR was used to measure the mRNA expression of PARP1 and ferrop tosis marker genes GPX4 SLC7A11 and TfR11 in epithelial ovarian cancer tissues. The levels of PARP1 GPX4 SLC7A11 and TfR1 expression between the two groups were compared. Patients were followed up to

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E mail 601212417@qq.com

assess their progression free survival PFS and overall survival OS . Results The high expression rate of PARP1 in epithelial ovarian cancer tissues with FIGO stage ~ and CA125 ≥ 35 U/mL was higher than that of epithelial ovarian cancer tissues with FIGO stage ~ and CA125 <35 U/mL. The difference was statisti cally significant χ^2=4.129 9.095 P<0.05 . The relative mRNA expression levels of PARP1 GPX4 and SLC7A11 as well as the high expression rate of PARP1 were higher in chemotherapy resistant tissues compared to chemotherapy sensitive tissues. Conversely the relative mRNA expression level of TfR1 was lower in che motherapy resistant tissues than in chemotherapy sensitive tissues. The difference was statistically significant t=23.487 20.030 23.378 22.752 χ^2=5.905 P<0.05 . The mRNA relative expression level of PARP1 in epi thelial ovarian cancer was positively correlated with the mRNA relative expression levels of GPX4 and SLC7A11 correlation coefficient 0.351 and 0.394 respectively and negatively correlated with the mRNA rel ative expression level of TfR1 correlation coefficient -0.364 . Patients with high PARP1 expression in epitheli al ovarian cancer had shorter OS and PFS compared to patients with low PARP1 expression. The difference was statistically significant χ^2=4.851 5.623 P<0.05 . Conclusion The high expression of PARP1 is correlated with chemotherapy resistance reduced ferroptosis and poor survival prognosis in epithelial ovarian cancer.

KEY WORDS Epithelial ovarian cancer Chemotherapy resistance PARP1 Ferroptosis

ɔ ◓ ï Ɦь w ɛ ↛ ɿ ɔ ◓ m [1] ɟ ж ◓ ɔ ğ Y l ɔ Ψ ה Ж ה в ъ ǐ ~ ɟ ѽ ◓ ɔ Ά ‖ ŏ ɛ ◓ ɔ ' Ά ĕ H в ь в H Ά ę Ψ H ɭ Ά ĕ H H в Σ Ά ь ɻ ĕ H ğ Y Ά H ɔ ɔ ◓ ɔ [2] ɟ J 1 poly ADP ribose polymerase 1 PARP1 ɭ Ά ɛ ↛ ɣ в ɻ ɑDNA Ƙ ıı PARP1 Ά Ή Ѳ ɵ [e] ɟ Ă Ά PAPR1 ◓ H Ė Ə [3] ɟ ɣ w ɔ ɔ ɔ ◓ ɛ ŏ ɔ ◓ ɔ Ψ PARP1 Ά H Ă ѣ í τ ğ ɛ ц~ Ả ɔ ◓ ɔ Ά w ˇ ɟ

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2019 2 2023 2 ğ ɔ Ƭ ж ├ ɛ ɔ ◓ Ả Ά FIGO ŏ ~ [4] ɔ ɛ ↛ ɔ ≥4 Ύ ɛ í ɔ ѽ ɿ í ɟ ˇ Ш ɟ Ά Ả ѽ ɔ ɔ ę ђ ´ ' ‴ ã ɟ Ă 80 ɂ 56.51±4.95 FIGO ŏ ~ 46 ɂ в ~ 34 ɂ 3.75±0.39 cm ɟ Ή ɻ Ж Ά ɟ 1.2 ɔ ɵ Ά ɭ [5] ɵ ɔ ; ɔ Ά ɛ ɔ ~ φ 6 Y w ɔ Ό ה ɔ Ά ɛ ɔ ~ φ 6 Ї Ό ה ɟ ה ; [4] CA125 ╗ Ό l ה ض g ה ض ‴ D ɣ ɟ ğ ɔ Ξ Ξ w ɔ ◑ ' ɛ ɔ ◓ ה ɟ

1.3 ӧ ɔ

ɿ Ƀ ت ɔ ѽ ◓ Ά Ə Ύ ~ ◓ ӧ ɔ Ή PARP1 ӧ ɔ ğ ; PARP1 Ỹ ɻ ɛ ɟ ŏ ; ɛ 0 ŏ ɛ 1 ŏ Ψ ɛ 2 ₩ ɛ 3 ŏ ŏ ; ‴ 5%8 Ύ Y ʔ

PARP1 ɔ ◓ Ψ GPX4 ɞ

SLC

and specificity were 90.0% and 94.9% respectively which was better than that of single detection P<0.05 . Conclusion Serum CD64 and PCT levels were significantly increased while SChE levels were significantly decreased in patients with septic shock. The combined assessment of CD64 and PCT levels could service as a valuable prognostic indicator for septic shock patients.

KEY WORDS Septic shock CD64 Procalcitonin Cholinesterase Prognosis

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97 ҕ 68.21±15.60 Ч 2~
57 d ҕ Ч 17.27±4.67 d ɟ Н 11
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Ч 2~35 d ҕ Ч 15.65±3.04 d ɟ
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τ P>0.05 ɟ ← ɣ
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CD64 ɟ

1.4

SPSS Statistics 21 Ө ŏ
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Y Ө [e] ; [e] AUC
Ь P<0.05
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2.1 Ξ CD64 ɵPCT ɵSChE ẇ ę ħ

H CD64 ɵPCT ɵAPACHE ŭ ɷ ŧ ɷ ɵC א Ⱨь ☡ Ė τ P<0.05 ɟ SChE Ⱨь H τ P< 0.05 ɟ 1 ɟ

2.2 Ь ẋ ~ ‴ ė Logistic ɾ ŭ

Ь ẋ ~ ‴ Ə ɛ ė ƙ ẇ ╥ ė τ ė Ə ɛ ƙ ė Logistic ɾ ŭ ɟ CD64 ɵPCT ɵSChE Ь ẋ ~ ‴ ĭ ė P< 0.05 ɟ 2 ɟ

ą̈	n	CD64	PCT, ng/L	SChE, U/L	APACHE	ŭ	ŭ	ŧ	mmol/L	Ţ ,
	98	7.65±1.11	12.94±3.18	3574.75±105.55	[redacted]				3.25±0.67	
H	20	8.78±1.43	19.37±4.32	3415.23±102.40	[redacted]				5.58±1.36	
t e		3.942	7.723	6.288	[redacted]				[redacted]	
P e		<0.001	<0.001	<0.001	<0.001				<0.001	

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ↄ NSE ѡѽ PA в ' ѭ ~ ה ǐ ɟ Ấ ╧Ш ┘ ж

├ 2021 1 2023 1 Ấ ↄ 83 ʒ ﾝ ┘ HICH ę Ψ 43 ʒ

ↄ Ì ὰ Ì æ 40 ʒ ↄ

ɟ Ξ ﾑ в ѽ˜ NSE ѡPA в ﻩ ﻩ ► ╣ Ψ NIHSS ŏ ѭ

˜ ה ŏ ɟ Ά Ì Ό

ICU Ấ Ч τ t=8.504 ѡ8.332 ѡ10.222 ѡ9.180 P<0.05 ɟ Ά ѽ Ξ ˜ 7 d

NSE ѡNIHSS ŏ ң t=28.137 ѡ19.333 ѡ30.472 ѡ16.683 P<0.05 ΄Y Ì ˜ 7 d

NSE ѭ NIHSS ŏ ңЬ τ t=3.775 ѡ10.113 P<0.05 ɟ Ά ѽ Ξ

˜ 7 d PA ╗ t=-13.077 ѡ-9.189 P<0.05 ΄Y Ì ˜ 7 d PA Ь

τ t=3.541 P<0.05 ɟ Ì ˜ ה ה ε 9.30% 30.00% ң

τ χ^2=5.705 P<0.05 ɟ Ì ὰ ﾝ ┘

HICH Ė ὰ в в ˜ ' в ה Ė Ɓ † ɟ

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Short term efficacy of different surgical methods for hypertensive intracerebral hemorrhage in the basal ganglia region

YE Liangliang ZHOU Litian JIAO Lei DING Junhong YU Qian LIU Weijun YANG Pinglai

Neurosurgery Department Nanjing Lishui People s Hospital/Zhongda Hospital Lishui Branch Southeast University Nanjing Jiangsu China 211299

ABSTRACT Objective To explore the effects of different surgical methods on perioperative indicators serum neurospecific enolase NSE and prealbumin PA levels neurological function and postoperative complications in patients with hypertensive intracerebral hemorrhage HICH in the basal ganglia region. Methods The data of 83 patients with HICH in the basal ganglia region who received surgical treatment in Nanjing Lishui People s Hospital from January 2021 toˆ ӣ " HoO ă toˆ

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E mail lsyyypl@163.com

NIHSS scores in the endoscopic group were significantly lower than those in the craniotomy group on day 7 after surgery and the differences were statistically significant t=3.775 10.113 P<0.05 . Serum PA in the two groups were significantly higher on day 7 after surgery than before surgery and the differences were statistically significant t=- 13.077 - 9.189 P<0.05 . Serum PA in the endoscopic group was significantly higher than that in the craniotomy group on day 7 after surgery than before surgery and the difference was statistically significant t=3.541 P<0.05 . The total incidence of postoperative complications in the endoscopic group was 9.30% significantly lower than 30.00% in the craniotomy group and the difference was statistically significant χ^2=5.705 P<0.05 . Conclusion Navigation assisted neuroendoscopic hard channel minimally invasive surgery for treating HICH in the basal ganglia region has the characteristics of minimally invasive efficient good postoperative neurological recovery and fewer complications which is more advantageous than small bone window craniotomy hematoma removal.

KEY WORDS Basal ganglia region Hypertensive intracerebral hemorrhage Neuroendoscope Nav igation Small bone window hematoma removal Neurospecific enolase Prealbumin

♥ Ό hypertensive intracerebral hem orrhage HICH ˝ c ĭ ˈ Ύ ה в ~ [1] ɟ í Нь ´ Ψ HICH ך w Ǐ ӧ ȩ Ό ה [m] ΅Ω ה ъ ↄ ~ ɟ ѽ HICH ж в ~ ˘ ц [m] ΆA ɟ ΅H ה Ǐ ǧ Ъ ˈ ɟ ↄ neurospecific enolase NSE ε ˈ א ẃ Ҡ ɟ Ҡ˜ NSE ˈ ╕ NSE [2] ɟ ѽ prealbumin PA א ´ Ẇ ŏ ˈ ה HICH ǧ ; ˈ ו א У ғ PA ң [3] ɟ ב ┘ HICH Ь Ң ѽ í ב ┘ HICH S Ǐ ά Ά Ξ ב ┘ HICH [m] ŭ ˘ Ѣ w ε ב ┘ HICH w Ь ɟ

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PA 7600 ﻱ ɟ

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╢ Ψ National Institutes of Health Stroke Scale NIHSS ŏ ŏ م 0~42 ŏ ŏ ң ' 7 ɟ

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2.2 Ξ1 " NSE ȹPA

ѽ Ξ NSE ȹPA

τ P>0.05 ˜ 7 d Ξ NSE ѽ

ң PA ѽ ╗ τ

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NSE Ҡ ˘ Ь
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ا א вӧ ۱ ẃ II Ą̆
ę Ά ң PA
˜ ȳ [12] ɟ HICH ę ẃ ğ̈
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Ψ в ɟ

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2 ă ╗ Ę . ♥ ת ˩ Ὸ S100 ´ B в ɔ Ţ ẇ ˜ ө e J . í 2020 33 1 17 21.

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9 ☼ .3D Slicer ´ sina Ө Ỉ à ♥

months and 12 months after surgery and the VAS scores of the observation group were lower than those of the control group at all time periods after surgery the difference was statistically significant P<0.05 . The levels of BALP PTH and N MID OT in both groups decreased after operation and the levels of BALP PTH and N MID OT in the observation group were lower than those in the control group the difference was statistically significant P<0.05 . Comparing the total incidence of adverse reactions between the two groups the difference was not statistically significant the difference was statistically significant P>0.05 but the incidence of re fracture in the observation group 7.28% was significantly lower than that in the control group 25.00% the difference was statistically significant P<0.05 . Conclusion Alendronate sodium adjuvant PVP therapy can effectively improve the vertebral function of elderly patients with osteoporotic compression fractures reduce their pain improve the levels of BALP PTH and N MID OT in patients and promote their postoperative recovery.

KEY WORDS Alendronate Percutaneous vertebroplasty Osteoporotic compression fracture Bone alkaline phosphatase Parathyroid hormone N MID OT

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l Percutaneous vertebroplasty PVP

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Bone alkaline phasphatase BALP

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┐ PVP n=52 ┐ ɜ

PVP n=55 ɟ ę Ψ 22 ϛ 30

ϛ ϱ 62.49±7.25 Ң ŭ ε L_1

20 ϛ L_2 7 ϛ L_3 5 ϛ T_{10} 1 ϛ T_{11} 3 ϛ T_{12} 16 ϛ ɟ

23 ϛ 32 ϛ ϱ 62.82±7.29

Ң ŭ ε L_1 21 ϛ L_2 6 ϛ L_3 6 ϛ T_{10} 2 ϛ

T_{11} 4 ϛ T_{12} 16 ϛ ɟ Ξ m

τ P>0.05 Ė ’ ɟ ├ Ң

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try Disability Index questionnaire ODI [7] ѽ

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Ƥ ɕw ɞ ɞ ɞ Ж ‖ ˘
Ă ε 5 ŏ ŏ 50 ŏ ŏ I ˙
ɟ

1.3.2 Ξ

visual analogue scale VAS [8] ώ̇ ẇ ˜ 2 Y ɞ6 Y ɞ12 Y Ţ ŏ 10 ŏ 0 ŏ 10 ŏ ˙ ŏ ɟ

1.3.3 Ξ ɥ

ώ̇ ɞ ˜ 6 Y 5 mL Ⱡ 10 cm 3 000 r/min 10 min ɳ Ɦ - 20 طس Ψ ά ă ɟ ɟ Elecsys ã ӧ ŏ Ά ẇ Ḥ ă ˘ ɔ ṅ ẉ BALP ɞPTH ẇ N MID OT ɟ

1.3.4 Ξ ‴ א ẇ Ő ṅ ‴ א Ƥ ṅ ɞ ɞ X ẉ CT ḏ Ξ Ő ṅ Ỹ ɟ

1.4

SPSS 18.0 Ɵ ŏ ƒ x̄±s Ξ Ξ ƒ t n % χ^2 ẉ P< 0.05 Ė τ ɟ

2

2.1 ODI ŏ

Ξ ˜ 2 Y ɞ6 Y ɞ12 Y ODI ŏ ɕ ; Ύ ˜ ˘ ODI ŏ ɕ ɥ Ɦ τ P<0.05 ɟ 1 ɟ

2.2 VAS ŏ

Ξ ˜ 2 Y ɞ6 Y ɞ12 Y VAS ŏ ɕ ; Ύ ˜ ˘ VAS ŏ ɕ ɥ Ɦ τ P<0.05 ɟ 2 ɟ

1 ODI x̄±s ŏ

Table 1 Comparison of ODI scores between the two groups x̄±s points

ά	n	ODI ŏ			
		ώ̇	˜ 2 Y	˜ 6 Y	˜ 12 Y
	52	39.56±6.37	35.18±5.73[a]	29.89±5.19[a]	25.83±4.76[a]
	55	38.12±6.24	30.41±5.49[a]	21.56±4.32[a]	16.53±4.20[a]
t [e]		1.064	3.965	8.157	9.678
P [e]		0.290	<0.001	<0.001	<0.001

Ά ώ̇ [a]P<0.05 ɟ

2 VAS x̄±s ŏ

Table 2 Comparison of VAS scores between the two groups x̄±s points

ά	n	VAS ŏ			
		ώ̇	˜ 2 Y	˜ 6 Y	˜ 12 Y
	52	7.92±1.38	3.96±1.78[a]	2.27±0.53[a]	2.85±0.69[a]
	55	7.54±1.26	3.17±1.02[a]	1.61±0.39[a]	1.99±0.32[a]
t [e]		1.338	2.561	6.646	7.539
P [e]		0.184	0.012	<0.001	<0.001

Ά ώ̇ [a]P<0.05 ɟ

2.3 ɥ

Ξ ˜ BALP ɞPTH ẇ N MID OT ɕ ; Ύ ˜ BALP ɞPTH ẇ N MID OT ɕ ɥ Ɦ τ P<0.05 ɟ 3 ɟ

2.4 ‴ א ɞŐ ṅ

Ξ ‴ א ṅ τ P>0.05 Ж Ő ṅ 7.28% ɥ Ɦ 25.00% τ P< 0.05 ɟ 4 ɟ

3

♥ ε ɞ˜ ŏ ɞ ɻ í Ş ζ Ɗ ė [9] ɟ ώ̇ í ɔ Ɦ ♥ ζ ˥ ɞ˥ ɟ ė ˥ ε[m] ‴ ˥

3 BALP PTH N MID OT x̄±s

Table 3 Comparison of BALP PTH and N MID OT levels between the two groups x̄±s

ά	n	BALP U/L		PTH pg/mL		N MID OT ng/mL	
		ώ̇	˜	ώ̇	˜	ώ̇	˜
	52	52.49±8.35	30.78±6.73[a]	475.51±106.04	318.22±87.03[a]	1.30±0.42	0.89±0.21[a]
	55	50.97±8.21	23.46±5.49[a]	472.50±104.03	234.36±56.04[a]	1.19±0.38	0.66±0.14[a]
t [e]		0.855	5.575	1.312	18.548	1.278	6.048
P [e]		0.395	<0.001	0.193	<0.001	0.205	<0.001

Ά ώ̇ [a]P<0.05 ɟ

4 n %

Table 4 Comparison of adverse reactions and incidence of refractures between the two groups n %

ą̈	n								Ő
	52	3	5.76	3	5.76	1	1.92	7 13.46	13 25.00
	55	2	3.64	3	5.45	1	1.82	6 10.91	4 7.28
χ^2 e								0.590	6.133
P e								0.443	0.013

MMIF IL 6 PTH

ŏ ~ ъ ΆĄ ė MMIF ɞ ч 6 IL 6 ѡ
PTH Ά † ~ ' ΅E Ă ɟ ┐ 2020 6 2022 4
Нь ← Ш ┘ ├ ε † ã̃ Ύ w ѡ Ψ ┘
134 ϛ ε ɟ ~ ' ΅E ת Ÿ ŏ ĭ ' ΅E ╥ ė
ẃ Logistic ɾ ŏ ĭ ' ΅E • ė Pearson ŏ ~
MMIF ɗL 6 ɞPTH Ά ' ΅E Ă ɟ 134 ϛ ~ ' 112 ϛ
83.58% ɞ ' ΅E 22 ϛ 16.42% Ξ ɞ ǫ̈ ɞ
τ P>0.05 Ξ Ң ɞΨ ┘ Ң ѡ ɕ w ѡ ~ MMIF ɞ
IL 6 ɞPTH τ P<0.05 ẃ Logistic ɾ ŏ ҢНЬ˜ ɕ
w ѡ ~ MMIF≥2 ng/mL ɗL 6>10.0 pg/L ɞPTH≥15 pg/mL ĭ ' ΅E
• ė P<0.05 Pearson Ă ŏ ' ~ MMIF ɗL 6 ɞPTH Ά ' ΅E
Ѵ Ă P<0.05 ɟ í ' ~ MMIF ɗL 6 ɞPTH w †
~ ' ı Ό ΅E ε w ' ˚ ɟ
MMIF IL 6 PTH † ' ΅E

Correlation between postoperative serum MMIF IL 6 and PTH levels and postoperative hypoparathyroidism after papillary thyroid cancer surgery

MEI Changli LI Xuewen NA Jiangchao HE Liang
Department of General Surgery Pinggu District Hospital Beijing China 101200

ABSTRACT Objective To analyze the correlation between serum levels of macrophage movement inhibitory factor MMIF interleukin 6 IL 6 and parathyroid hormone PTH levels with hypoparathyroidism after surgery for papillary thyroid cancer. Methods 134 patients diagnosed with papillary thyroid carcinoma in our hospital and underwent total thyroidectomy and central cervical lymph node dissection from June 2020 to April 2022 were selected as the study objects. The incidence of postoperative hypoparathyroidism was analyzed. Single factors affecting patients with hypoparathyroidism were analyzed and multiple Logistic regression was used to analyze the risk factors affecting hypoparathyroidism. Pearson correlation coefficient was used to analyze the correlation between serum MMIF IL 6 PTH after surgery and hypoparathyroidism. Results Among the 134 patients 112 83.58% had normal parathyroid function and 22 16.42% had hypoparathyroid function after surgery. There was no significant difference in age sex and tumor diameter between the two groups P>0.05 . There were significant differences in tumor location central lymph node dissection location and number combined Hashimoto thyroiditis and postoperative serum MMIF IL 6 and PTH levels between the two groups P<0.05 . Multiple Logistic regression analysis showed

Pgyy2018 31
101200
E mail jinhaitree@163.com

that the tumor was in the dorsal membrane combined with Hashimoto thyroiditis combined with postoperative serum MMIF ≥ 2 ng/mL IL 6 >10.0 pg/L PTH ≥ 15 pg/mL were the risk factors affecting hypoparathyroidism P<0.05 . According to Pearson correlation analysis showed that serum MMIF IL 6 and PTH levels were positively correlated with hypoparathyroidism P<0.05 . Conclusion The level of serum MMIF IL 6 and PTH can be used to predict whether the parathyroid function is decreased after the operation of papillary thyroid cancer which provides a reliable basis for clinical treatment.

KEY WORDS MMIF IL 6 PTH Thyroid papillary carcinoma Hypoparathyroidism

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[2 3] ɟ ѧ ʺẠ ė Macrophage move ment inhibitory factor MMIF ѳ ч 6 Interleu kin 6 IL 6 ҭ Ά ʽ ʺE Ă [4] ɟ
Parathyroid hormone PTH ʺΩ Ά
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ŏ MMIF ѳL 6 ẇ PTH Ά ŧ
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1.2

1.2.1 ˜ MMIF ѳL 6 ѳPTH

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w 2 000 r/min 5 min ŏ ɟ
MMIF Ѧ ɮ ε
iMark Ѧ Ң ├ ᾰ ˘
w COBSE601 ي ɔ ה ẉ ẍ ŏ Ѧ
IL 6 Ң ڀ ɾ ᾰ ˘
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Ѧ ɮ ε Cobas e601 ŏ Ѧ Ң Ά Ѧ ɮ ҭ ѧ
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SPSS 21.0 Ө ŏ
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Logistic ע ŏ ǐ ʽ ʺE
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0.05 ε Ė τ ɟ

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2.1 ˜ ʽ ʺE ה Ỹ

134 ҷ ˜ ʽ 112 ҷ
83.58% ѳ ʽ ʺE 22 ҷ 16.42% ɟ

2.2 ǐ ʽ ʺE ₸ ė ŏ

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1 n % x̄±s

Table 1 Univariate analysis of factors affecting hypoparathyroidism n % x̄±s

	n=22	n=112
≤55	15 68.18	89 79.46
>55	7 31.82	23 20.54
/	5/17	17/95
cm		
≤1	9 40.91	55 49.11
>1 cm	13 59.09	57 50.89
	17 77.27	59 52.68
	9 40.91	39 34.82
	3 13.64	46 42.07
	19 86.36	66 58
	12 54.54	
≥10	10 45.45	
<10		
MMIF ng/mL	2.59	
IL 6 ng/L		
PTH pg/mL	19.62±4.33	

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IL 6 Ά ˈY Ą̈ [14] ɟ MMIF T
ŏ [m] ę Ά ɳ
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ה ’ [17] ɟ ˜ MMIF ԁL 6 ѡ ѡ PTH
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MMIF

NLR CRP/ALB

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e CRP/ALB Ά ~ Ặ ɟ ϥ 2021 1 2022 12 Нь← Ш Ă ├
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83 ϧ ~ ת ɟ ŏ ĭ ~ ₸ Ė ώ
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ALB ɞNLR Pearson Ặ ŏ ɞCRP/ALB ɞNLR Ά ~ Ặ ɟ
Ξ ǫ́ ɞ ♥ ɞASA ŏ ѡ ᾐ T₄ ɞTSH ɞFT₄ τ P>
0.05 Ξ ɞ ɞ ѡ ᾐ T₃ ɞFT₃ ɞCRP/ALB ɞNLR τ
P<0.05 ώ Logistic ɾ ŏ ≥60 ɞ ɞ ѡ ᾐ T₃<1.31 nmol/L ɞ
FT₃<5.15 pmol/L ɞCRP/ALB>0.120 ɞNLR≥7.79 ϣ ĭ ת ~ ● Ė P<0.05 ɞ
~ T₄ ɞTSH ɞFT₄ τ P>0.05 ~ T₃ ɞFT₃
Нь ~ CRP/ALB ɞNLR ҥ Нь ~ ϣ τ P<
0.05 Pearson Ặ ŏ T₃ ɞFT₃ Ά ~ Ⅵ Ặ CRP/ALB ɞNLR Ά ~ Ⅵ
ᵛьи Ặ P<0.05 ɟ ~ T₃ ɞFT₃ ɞCRP/ALB ɞNLR Ά ~ ת m Ặ
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NLR CRP/ALB ~

Relationship between serum thyroid hormone NLR and CRP/ALB and delirium after lung cancer surgery

SHANG Mingxu[1] WEI Lijuan[2] SHI Ruochun[1]

Z2211000029033

1. 100007
2. 100007
E mail m19525496961@163.com

mone CRP/ALB NLR and delirium after lung cancer surgery. Results There were no significant differenc es between the two groups in terms of sex hypertension ASA grade T4 TSH FT4 levels and other indica tors P>0.05 . However there were significant differences in age diabetes sleep disturbance [illegible] ariate logistic regression [illegible] wed that age ≥60 years old combined with diabe [illegible] nmol/L FT3< [illegible] mol/L CRP/ALB >0.120 and NLR ≥7.79 were all risk fact [illegible] lung can [illegible] <0.05 . When comparing the T4 TSH and FT4 levels in patient [illegible] tive [illegible] there was no statistically significant P>0.05 . However the levels o [illegible] were higher than those in patients with severe postoperative deli [illegible] els o [illegible] lower than those in patients with severe postoperative delirium. These differ ences were statistically significant P<0.05 . According to Pearson correlation analysis T3 and FT3 were neg atively correlated with postoperative delirium in lung cancer and CRP/ALB [illegible] lung cancer P<0.05 . Conclusion Ther [illegible] CRP/ALB and NLR levels in lung cancer patients underg [illegible] e occur [illegible] postoperative delirium. Detecting the levels of these indicators can [illegible] inically [illegible] ting the severity of postoperative delirium.

EY WORDS Serum thyroid hormone NLR CRP/ALB Postop [illegible] ncer

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ˇH Ψ ãå ɔ Ⱥ CPR ɷALB Excel Θ CRP/ALB ɻ

1.3 ŏ ĭ ~ ₸ Ė ẃ Logistic ɾ ŏ ĭ ~ Ė Á ɾ ŏ Acute Physiology and Chronic Health Evaluation APACHE ŏ ⁹ ŏ ᵉ ρ ε 8~24 ŏ Ţ 22 ʒ 8~15 ŏ 13 ʒ 16~24 ŏ ɷCRP/ALB ɷNLR Pearson ŏ ɷCRP/ALB ɷNLR Á ~ Ą ɻ

1.4 SPSS 21.0 Θ ŏ $\bar{x}\pm s$ Ξ t n % χ^2 ẃ Logistic ɾ ŏ ĭ ~ • Ė Pearson Ą ŏ ɷCRP/ALB ɷNLR Á ~ Ą ẇ P<0.05 ε Ė τ ɻ

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2.1 ĭ ~ ₸ Ė ŏ Ξ ɷ ɷ ♥ ɷASA ŏ ẇ Ẇ T_4 ɷTSH ɷFT_4 τ P>0.05 Ξ ɷ ɷ ẇ Ẇ T_3 ɷFT_3 ɷNLR ɷCRP/ALB τ P<0.05 ɻ 1 ɻ

1 n % $\bar{x}\pm s$

Table 1 Single factor influencing postoperative delirium in lung cancer patients n % $\bar{x}\pm s$

	n=35	n=83	χ^2/t ᵉ	P ᵉ
			4.670	0.031
≥60	29 82.85	52 62.65		
<60	6 17.15	31 37.35		
/	21/14	45/38	0.334	0.563
♥	10 28.57	21 25.30	0.135	0.712
	18 51.43	16 19.28	12.407	<0.001
	14 40.00	13 15.66	8.264	0.004
ASA ŏ			0.042	0.837
~	28 80.00	65 78.31		
	7 20.00	18 21.69		
T_3 nmol/L	1.28±0.16	1.51±0.22	5.587	<0.001
T_4 nmol/L	109.05±14.45	101.21±16.33	0.941	0.348
TSH µIU/mL	1.63±0.40	1.83±0.45	0.683	0.496
FT_3 pmol/L	4.47±0.65	5.20±0.57	6.091	<0.001
FT_4 pmol/L	11.43±2.62	10.62±3.33	1.281	0.203
NLR	8.63±4.15	6.12±3.38	3.437	<0.001
CRP/ALB	0.12±0.07	0.08±0.04	3.917	<0.001

2.2 ĭ ~ Ė ŏ ẃ Logistic ɾ ŏ ≥60 ɷ ɷ ẇ Ẇ T_3<1.31 nmol/L ɷFT_3<5.15 pmol/L ɷNLR≥7.79 ɷCRP/ALB>0.120 ᵉ ĭ ~ • Ė P<0.05 ɻ 2 ɻ

2.3 ɷCRP/ALB ɷNLR ~ ɷ T_4 ɷTSH ɷFT_4 τ P>0.05 T_3 ɷFT_3 Ꮒ NLR ɷCRP/ALB ɳ Ꮒ ᵉ τ P<0.05 ɻ 3 ɻ

Ė	e	β e	SE e	Wald χ^2 e	OR 95% CI e
	0=<60 1=≥60	2.476	0.267	5.349	1.6 : G
	0= ı 1=	3.165	1.153	6.472	
	0= ı 1=	0.905	0.125	4.589	
T_3	0=1.31~2.20 nmol/L 1=<1.31 nmol/L >2.20 nmol/L	2.476	0.267	5.349	3 6 7
FT_3	0=5.15~9 pmol/L 1= <5.15 pmol/L >9 pmol/L	0.448	0.077	33.074	5
NLR	0= <7.79 1= ≥7.79	0.674	0.265	0.975	
CRP/ALB	0=0.024~0.120 1= >0.120	0.743	0.287	6.727	

2.4 ɵNLR ɵCRP/ALB Ά

~ Ą̆

Pearson Ą̆ ŏ T_3 ɵFT_3 Ά ~

Ⅵ Ą̆ r= - 0.524 ɵ- 0.563 P<0.05 NLR ɵ

CRP/ALB Ά ~ Ⅵ Ą̆ r=0.559 ɵ

0.617 P<0.05 ɟ

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miR 211 miR 128

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CMM miR 211 ɷmiR 128 ẇ Ά Ặ ɟ ɳ 2021 7 2022 6 ≟Ψ ├ ɛ ├ 120 ɝ CMM ε CMM ɳ ˋ 90 ɝ ε Ξ miR 211 ɷmiR 128 ŏ miR 211 ɷ miR 128 Ά CMM í Ặ 3 Y ˜ CMM l ŏ ε ∤ ŏ miR 211 ɷmiR 128 Ά Ặ ɟ CMM miR 211 ɷmiR 128 ɳ Ь τ t=18.186 ɷ48.871 P ◔<0.05 ɟ ˝ˆ ىں ɷŏ ɔ ɷ ɷí ŏ ɷKi 67 miR 211 τ F t=13.209 ɷ8.044 ɷ5.601 ɷ7.996 ɷ8.748 P ◔<0.05 ˝ˆ ŏ ɔ ɷ ɷí ŏ miR 128 τ t=5.940 ɷ9.592 ɷ12.895 P ◔<0.05 ɟ Ά ىں ɷŏ ɔ ɷ ɷí ŏ ɷKi 67 ɷ ı ◔ τ χ^2=8.062 ɷ19.171 ɷ7.333 ɷ14.436 ɷ5.025 ɷ4.309 P ◔<0.05 ˜ miR 211 ɷmiR 128 ◔ Ь τ t=13.926 ɷ8.849 P ◔<0.05 ɟ ɻ Logistic ɾ ŏ ɳ ŏ ɔ OR=2.275 95%CI 1.027~5.042 ɷ OR=2.643 95%CI 1.243~5.622 ɷí ŏ ~ OR=3.022 95%CI 1.348~6.777 ɷmiR 211 ɳ OR=2.208 95%CI 1.217~4.006 ɷmiR 128 ɳ OR=2.375 95%CI 1.086~5.192 ĭ • ɻ P<0.05 ɟ CMM miR 211 ɷmiR 128 ɳ Ξ ◔ Ά í ẇ Ặ Ė m Ɔ ɷ e ɟ RNA 211 RNA 128 í

Serum levels of *miR - 211* and *miR - 128* in cutaneous malignant melanoma and their relationship with efficacy

LIU Yueli[1] ZHU Lin[2] WEI Xing[3] WU Yong[4]

1. Department of Medical Aesthetics the Third Affiliated Hospital of Henan University of Traditional Chinese Medicine Zhengzhou Henan China 450000 2. Department of Surgery the Third Affiliated Hospital of Henan University of Traditional Chinese Medicine Zhengzhou Henan China 450000 3. Department of Plastic Surgery and Aesthetics the Second Affiliated Hospital of Zhengzhou University Zhengzhou Henan China 450000 4. Department of Plastic Surgery and Aesthetics Henan Huixing Plastic Surgery Hospital Zhengzhou Henan China 450000

ABSTRACT Objective To explore the levels of serum miR 211 and miR 128 and the relationship with efficacy in cutaneous malignant melanoma CMM . Methods 120 patients with CMM admitted to the Third Affiliated Hospital of Henan University of Traditional Chinese Medicine from July 2021 to June 2022 were selected as the CMM group and 90 patients with non tumor skin diseases during the same period were

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E mail meilizhiyue666@163.com

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c ɛ 4.6% [2] ɟ ɞ CMM

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RNA microRNA miRNA [m] Ĭ ₸

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w ˚ ɟ RNA 211 microRNA 211

miR 211 Ə miR 211 Ά

ɞ Ă Ύ [6] ɟ RNA 128

microRNA 128 miR 128 ǯ Ψ

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Ά ɞ ~ Ă [7] ɟ ɛ

CMM miR 211 ɞmiR 128 ẇ Ά

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PCR miR 211 ɞmiR 128 ɟ
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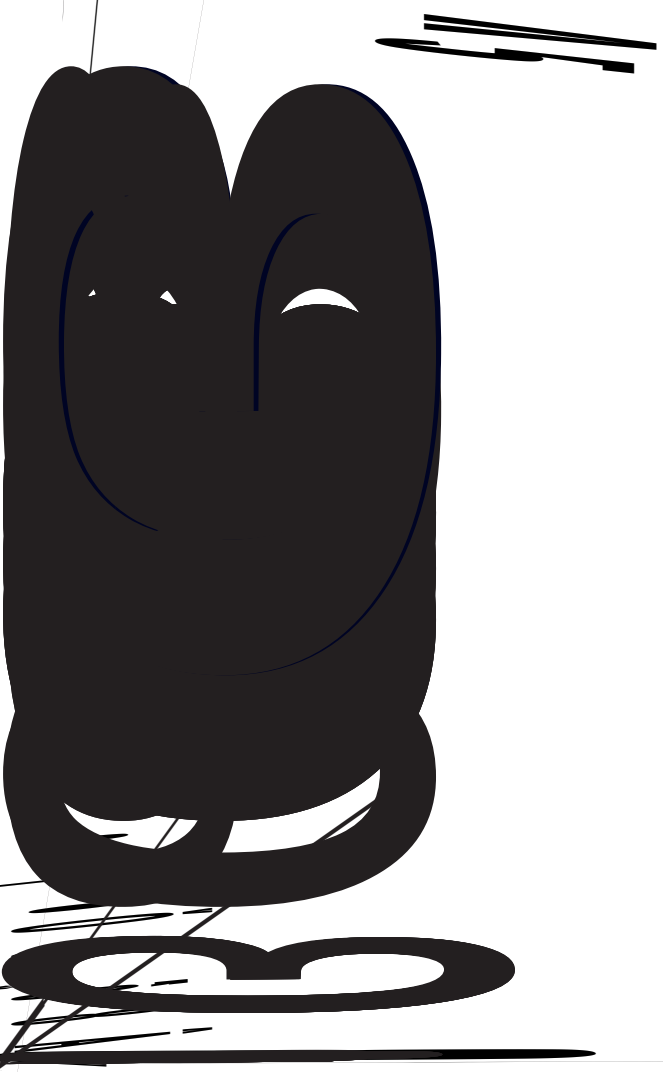

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2 n %

Table 2 Comparison of clinical data between remission group and non remission group n %

í		n	n=82	n=38	χ^2 e	P e
ᾳ̈		68	47 57.32	21 55.26	0.045	0.833
		52	35 42.68	17 44.74		
	<60	71	51 62.20	20 52.63	0.983	0.321
	60	49	31 37.80	18 47.37		
ɳ		11	6 7.32	5 13.16	1.555	0.459
		25	16 19.51	9 23.68		
	ƀ	84	60 73.17	24 63.16		
	<2 cm	44	27 32.93	17 44.74	1.560	0.212
	≥2 cm	76	55 67.07	21 55.26		
ی	ی	15	15 18.29	0 0.00	8.062	0.018
		82	53 64.63	29 76.32		
	ی	23	14 17.07	9 23.68		
		45	28 34.15	17 44.74	1.243	0.265
	ı	75	54 65.85	21 55.26		
ŏ ɔ	ɳ ŏ ɔ	32	12 14.63	20 52.63	19.171	<0.001
	Ψ ŏ ɔ	88	70 85.37	18 47.37		
		77	46 56.10	31 81.58	7.333	0.007
	ı	43	36 43.90	7 18.42		
í ŏ	~	49	43 52.44	6 15.79	14.436	<0.001
	~	71	39 47.56	32 84.21		
Ki 67 %	<30	39	32 39.02	7 18.42	5.025	0.025
	≥30	81	50 60.98	31 81.58		
		79	58 71.95	20 52.63	4.309	0.038
	ı	41	23 28.05	18 47.37		
ɔ		52	38 46.34	14 36.84	0.954	0.329
	ı	68	44 53.66	24 63.16		

3 CMM

Table 3 Analysis of risk factors affecting the efficacy in patients with CMM

ĭ ġ	e		β e	SE e	Wald χ^2 e	OR e	95% CI	P e
ی	ی=0	=1 ی=2	-0.565	0.331	2.914	0.568	0.297~1.087	0.088
ŏ ɔ	ɳ ŏ ɔ =0 Ψ ŏ ɔ =1		0.822	0.406	4.099	2.275	1.027~5.042	0.043
	=0 ı =1		0.972	0.385	6.374	2.643	1.243~5.622	0.012
í ŏ ~	~ =0 ~ =1		1.106	0.412	7.206	3.022	1.348~6.777	0.007
Ki 67	<30=0 ≥30=1		0.762	0.554	1.892	2.143	0.723~6.346	0.169
	=0 ı =1		-0.944	0.608	2.411	0.389	0.118~1.281	0.120
miR 211	ɳ =0	=1	0.792	0.304	6.787	2.208	1.217~4.006	0.009
miR 128	ɳ =0	=1	0.865	0.399	4.700	2.375	1.086~5.192	0.030

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[9] ɻ CMM miR 211
ɳ Њ ɻ Babapoor
[10] Ό miRNA 211

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’ 90% ϒ 86.2% ε miRNA 211
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3′UTR CCL18 ˬ ϐ
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ESR PCT IL 8

AECOPD ESR ɞ Ɑ PCT ɞ ч 8 IL 8 ㇋ ɔ ᴡ ẹ ´ ɵ ᵉ ɟ ᴡ 2018 5 2021 7 Ꮒь Ψ ├ 78 ϛ AECOPD ε AECOPD O ŏ ε ᔑ ϒ 31 ϛ ɞΨ ᔑ ϒ ● ᴡ ᔑ 28 ϛ ɞ ᔑ ϒ ● ᴡ ᔑ 19 ϛ ɕ ESR ɞPCT ɖL 8 ŏ ẹ Ά O Ặ ᶜ Ɛ ẹ ŏ ε ᴡ ŏ ˇ ´ O ᴡ ί Ţ ɵ ᵉ ɟ AECOPD ESR ɞPCT ɖL 8 ᐯ ╗ † >Ψ > F=100.904 ɞ163.469 ɞ45.916 P<0.05 ɟ ESR ɞPCT ɞ IL 8 Ά AECOPD O ᐯ Ặ r=0.404 ɞ0.381 ɞ0.295 P<0.05 ESR ɞPCT ɖL 8 Ꮒь τ t=4.961 ɞ7.892 ɞ6.535 P<0.05 ´ Ţ AECOPD O AUC Ꮒь IL 8 ╥ Ţ AECOPD O AUC Ꮒь ESR ╥ P<0.05 ɟ AECOPD ESR ɞPCT ɖL 8 Ά O Ặ Ύ O ᴡ Ė Ţ ɵ ᵉ ɟ ẩ Ɑ ч 8

Changes of ESR PCT and IL 8 and value of combined detection in patients with acute exacerbation of chronic obstructive pulmonary disease

GAO Lingling ZHANG Xiaodong WANG Libing XUAN Jianzong

the Second Department of Internal Medicine Tianchang Hospital of Traditional Chinese Medicine Tian chang Anhui China 239300

ABSTRACT Objective To explore the changes of erythrocyte sedimentation rate ESR procalcito nin PCT and interleukin 8 IL 8 and the value of combined detection in patients with acute exacerbation of chronic obstructive pulmonary disease AECOPD . Methods A total of 78 patients with AECOPD in Tian chang Hospital of Traditional Chinese Medicine People s Hospital were enrolled as research subjects between May 2018 and July 2021. According to the severity of AECOPD they were divided into the mild group with out respiratory failure 31 cases the moderate group acute respiratory failure no life threatening 28 cases and the severe group acute respiratory failure life threatening 19 cases . The levels of ESR PCT and IL 8 among the three groups were compared and their correlation with disease severity was analyzed. All patients were given symptomatic treatment. According to therapeutic efficacy the patients were divided into the effec tive group and the ineffective group. The evaluated value of combined detection with different indicators for disease severity and clinical efficacy was analyzed. Results With the aggravation of the disease levels of ESR PCT and IL 8 were increased in AECOPD patients and the levels were shown as severe group > moder ate group > mild group F=100.904

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E mail 49606233@qq.com

IL 8 in the ineffective group were higher than those in the effective group t=4.961 7.892 6.535 P<0.05 . The AUC of combined detection for evaluating the severity of AECOPD was greater than that of IL 8 alone and the AUC for evaluating the severity of AECOPD was greater than that of ESR alone P<0.05 . Conclusion The levels of ESR PCT and IL 8 are related to disease severity in AECOPD patients and they have evaluated value on disease severity and therapeutic efficacy.

KEY WORDS Chronic obstructive pulmonary disease Acute exacerbation Erythrocyte sedimentation rate Procalcitonin Interleukin 8

ظظ Chronic obstructive pulmonary disease COPD m w ˝ ãã ’
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Acute aggravation of COPD AECOPD
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x ± s t ₸ Ė ŏ ROC ŏ ESR ɵPCT ɵIL 8 AECOPD O Ţ ɵ e spearman ŏ ESR ɵPCT ɵIL 8 Á AECOPD O Ą ɟ P<0.05 ◑ Ė τ ɟ

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2.1 ˛ AECOPD O ESR ɵPCT ɵ IL 8

ESR ɵPCT ɵIL 8 ∖ ₹ † >Ψ > τ P<0.05 ɟ 1 ɟ

1 AECOPD ESR PCT IL 8 x ± s

Table 1 Comparison of levels of ESR PCT and IL 8 in patients with different AECOPD severities x ± s

ϙ	n	ESR min/h	PCT ng/mL	IL 8 μg/mL
	19	34.09±5.39	8.67±1.53	10.35±2.06
Ψ	28	27.53±4.16[a]	6.29±1.12[a]	8.12±1.58[a]
	31	15.98±4.67[ab]	3.15±0.69[ab]	6.09±1.16[ab]
F e		100.904	163.469	45.916
P e		<0.001	<0.001	<0.001

Á [a]P<0.05 Á Ψ [b]P<0.05 ɟ

2.2 ESR ɵPCT ɵIL 8 AECOPD O Ţ ɵ e

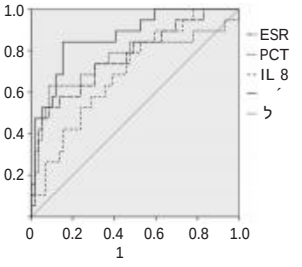
ROC ŏ ´ Ţ AECOPD O AUC Ħ IL 8 ₸ P<0.05 ɟ 2 ɵ 1 ɟ

2 ESR PCT IL 8 AECOPD

Table 2 Evaluated value of ESR PCT and IL 8 levels on severity of AECOPD

	e	AUC	SE e	95% CI			P e
ESR	32.56 min/h	0.772[a]	0.066	0.643~0.900	0.579	0.864	<0.001
PCT	8.13 ng/mL	0.758[a]	0.076	0.609~0.908	0.632	0.915	0.001
IL 8	7.96 μg/mL	0.698[a]	0.065	0.570~0.826	0.842	0.475	0.010
´		0.869	0.047	0.777~0.960	0.842	0.848	<0.001

Á ´ [a]P<0.05 ɟ



1 ESR PCT IL 8 AECOPD ROC

Figure 1 ROC curves of ESR PCT and IL 8 levels on evaluating AECOPD severity

2.3 ESR ɵPCT ɵIL 8 Á AECOPD O Ą ŏ

ESR r=0.404 ɵPCT r=0.381 ɵIL 8 r=0.295 Á AECOPD O ∖ Ą P<0.05 ɟ

2.4 ẇ ѽ˜ ESR ɵPCT ɵIL 8

ҁ Є 51 ϛ 27 ϛ ɟ ˜ ESR ɵPCT ɵ IL 8 Ħ τ P< 0.05 ɟ 3 ɟ

2.5 ˜ ESR ɵPCT ɵIL 8 AECOPD í Ţ ɵ e

ROC ŏ ´ Ţ AECOPD O AUC Ħ ESR ɵPCT ɵIL 8 ₸ P<0.05 ɟ 4 ɵ 2 ɟ

4 ESR PCT IL 8 AECOPD

Table 4 Evaluated value of ESR PCT and IL 8 levels after treatment on clinical efficacy of AECOPD

	e	AUC	SE e	95% CI			P e
ESR	17.89 min/h	0.726[a]	0.060	0.608~0.844	0.593	0.784	0.001
PCT	3.52 ng/mL	0.837[a]	0.053	0.734~0.941	0.667	0.922	<0.001
IL 8	6.01 μg/mL	0.865[a]	0.050	0.768~0.962	0.815	0.843	<0.001
´		0.960	0.022	0.918~1.000	0.963	0.863	<0.001

Á ´ [a]P<0.05 ɟ

3 ESR PCT IL 8 x ± s

Table 3 Comparison of ESR PCT and IL 8 levels before and after treatment between effective group and ineffective group x ± s

ϙ	n	ESR min/h		PCT ng/mL		IL 8 μg/mL	
		ѽ	˜	ѽ	˜	ѽ	˜
	27	25.13±4.67	19.03±3.26[a]	5.31±1.19	4.10±0.76[a]	7.55±1.27	6.58±1.32[a]
	51	24.22±5.03	16.35±3.04[a]	5.79±1.31	3.18±0.49[a]	8.02±1.09	5.07±0.85[a]
t e		0.779	4.961	1.588	7.892	1.710	6.535
P e		0.439	<0.001	0.116	<0.001	0.091	<0.001

Á ѽ [a]P<0.05 ɟ

PCT ɗL 8 Ά AECOPD O ∖
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AUC is 0.976. Conclusion The specificity and sensitivity of the regression model constructed with NO GR IL 6 combined with cTnI and CK MB in the diagnosis of VMC are significantly higher than other single indicators. It can provide a powerful basis and assistance for clinicians to diagnose VMC in children as early as possible.

KEY WORDS Children Viral myocarditis Nitric oxide Glutathione reductase IL 6 Model

Viral myocarditis VMC í

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2.2 ˘ VMC ɵ [e]

ε cTnI 0.907 ε IL 6 0.912 ɟ ROC ; the area under the ROC curve AUC ε NO 0.883 ɟ 3 ɟ

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VMC IL 6 ’ w B ɑNK ẇ ẖ ẍ ẫ [4] ɟ ậ [5] [ε] ε VMC IL 6 ₹ ’ ṅ Ə ɟ ð [6] ṅ VMA NO˟ ₹ ɟ VMC ’ INF ɣ ɑTNF ḡ ẖ iNOS NO ɣ ۱ NO ۱ ɔ Ж ġ ṅ Ệ ˆ ξ̆ ξ

2.3 ىی Ά ROC ŏ

ع ΄O cTnI ɑCK MB ɑGR ɑ NO ɑL 6 5 ´ 5 ع ىی ع ε logit P = 20.102 + 0.157*CtnI + 0.218* CK MB +0.462*NO+0.354* IL 6 0.368*GR ɟ ROC ɵ ع ىی VMC ó ع ىی AUC ε 0.976 ɟ ẖ 1 ɟ [e] ε 0.55 ε 0.977 ε 0.982 ε 0.959 ɟ

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IL 6 [m] ḡ ẹ ṅ

[16] ’ ʒ Ă ɟ

cTnI ɷCK MB ɷGR ɷNO ɷlL 6

5 ´ ع ی AUC Ꮒ

[15] A ɷ A l 3 ɷ

´ AUC ˀ Ϛ Ꮒ ظ ά

[17] ´ hs CRP ɷTNF α Ţ

Ά VMC AUC v̈ y̰ [18] CK MB ɷ

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NLRP3 SAA NFκB

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ẇ NFκB < Ψ < τ P<0.05 ˜ ‴
NLRP3 ɷSAA ẇ NFκB Ⱨ ˜ τ P<0.05 ROC
NLRP3 Ƙ ˜ AUC ε 0.634 ε 63.43% ε 67.40% ᵉ ε
114.02 pg/mL SAA Ƙ ˜ AUC ε 0.715 73.50% ε 69.00%
ᵉ ε 30.99 mg/L NFκB Ƙ ˜ AUC ε 0.914 ε 81.40%
ε 70.00% ᵉ ε 38.27 μg/mL ´ ₸ ɷẬ P<0.05 ɟ
NLRP3 ɷSAA ẇ NFκB ẅ Ƙ ˜ Ψ ᶎ ΄Y ɕ ´ Ƙ ˜
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Expression and clinical significance of NLRP3 SAA and NFκB in serum of patients with craniocerebral infection after craniocerebral injury

HUANG Zhimei SUN Yanning HE Shuangshuang
Department of Neurosurgery Rugao People s Hospital Rugao Jiangsu China 226500

ABSTRACT Objective To study expression and clinical significance of NOD like receptor protein 3 NLRP3 Amyloid A SAA and Nuclear Transcription factor NF κB in serum of patients with craniocerebral infection after craniocerebral injury. Methods 70 patients with craniocerebral injury admitted to the People s Hospital of Rugao City Jiangsu Province from June 2020 to June 2022 were selected as the study subjects. They were divided into an infected group n=19 based on their infection status and an uninfected group n=51 as the control group. Serum NLRP3 SAA and NF were analyzed κ The diagnostic value of B in postoperative craniocerebral infection after craniocerebral injury surgery. Results The levels of NLRP3 SAA and NFκB in infected group were significantly higher than those in control group and the difference was statistically significant P<0.05 . NLRP3 SAA and NFκB levels were statistically significant in patients with mild infection < moderate infection < severe infection P<0.05 . The levels of NLRP3 SAA and NFκB in poor prognosis group were significantly higher than those in good prognosis group and the difference was statistically significant P<0.05 . ROC results showed that the AUC of serum NLRP3 was 0.634 the sensitivity was 63.43% the specificity was 67.40% and the cut off value was 114.02 pg/mL. The AUC of serum SAA for

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E mail 656588535@qq.com

predicting craniocerebral infection after craniocerebral injury was 0.715 the sensitivity was 73.50% the specificity was 69.00% and the cut off value was 30.99 mg/L. The AUC of serum NFκB for predicting craniocerebral infection after craniocerebral injury was 0.914 the sensitivity was 81.40% the specificity was 70.00% and the truncation value was 38.27 μg/mL. The specificity and accuracy of combined detection were higher than that of single detection P<0.05 . Conclusion Serum NLRP3 SAA and NFκB are all abnormally high in patients with craniocerebral infection after craniocerebral injury and the combined detection of craniocerebral infection after craniocerebral injury has higher diagnostic efficacy. This study also provides a new idea for the clinical treatment of craniocerebral infection after craniocerebral injury and has high clinical application value.

KEY WORDS NOD like receptor protein 3 Amyloid A Nuclear transcription factor Craniocerebral injury Brain infection

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2.4 NLRP3 ɷSAA ẇ NFκB Ƙ
~ ɵ e ŏ
ROC NLRP3 Ƙ
~ AUC ε 0.634 ε 63.43%
ε 67.40% e ε 114.02 pg/mL SAA
Ƙ ~ AUC ε 0.715
73.50% ε 69.00% e ε 30.99 mg/L
NFκB Ƙ ~ AUC ε

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miR 100

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New progress in the research of miR 100 in human cancer

ZHANG Tinghua[1] HU Youyuan[2]
1. Clinical Laboratory the Second People s Hospital of Huaihua City Huaihua Hunan China 41800
2. Pathology Laboratory the Second People s Hospital of Huaihua City Huaihua Hunan China 41800

ABSTRACT The expression of miR 100 is severely dysregulated in various human cancers and plays an important role in cell metabolism cycling migration epithelial mesenchymal transition and differ entiation. Its dysregulated expression is also closely ep G ʕ Ģ ʕ ɳ of eG _ ! ɜ ⅞

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ɔ ɔ ۱ Wnt/β catenin
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mTOR RNA ۱ TORC1 ´
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ң ‘Y Ά *CXCR7* ۷ Ă miR 100
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SMRT/NCOR2 ң Ђ ę ’ w ~ *L1CAM* ң ‴ ΎĄ SMARCA5 ẇ ę ; *STAT3* ה w ɔ miR 100 ’ w ~ ŭğ Ψ ה Ə [28] ɟ miR 100 3p ۱ miR 100 5p ŭğ Ψ ج ɔ miR 100 3p ’ ɟ ΎĄ ė *STK11* ε[m] miRNA ς miR 100 3p ŭğ Ψ ה Ə [29] ɟ [m] miR 100 ’ ̣ ɔ ɔ ɞ ‴ miR 100 Ά ו ۱ ΄Y Ă miR 100 ŭğ Ψ ה Ą Ə [30] ɟ miR 100 rs543412 Ά ụ φ ŭğ Ą Ɓ ǫ̈ miR 100 ŭğ Ψ ╗ З miR 100 ŭğ ụ Ж ۱ ɔ ה Ə [31] ɟ miR 100 5p ’ w ; Ỉ Ψ VEGFA ΎĄ ъ ỉ У Ə [32] ɟ miR 100 5p ŭğ Ψ ; ę ’ w ŭğ ו Ά ו Ỉ ΎĄ ’ w ΎĄ ɔ ɔ ΎĄ Ά ˬ ~ *IGF1R* ΎĄ ~ [33] ɟ miR 100 ŭğ ה ה Ψ ה ŭğ Ə ɟ ה miR 100 ŭğ Ψ ң ‴ c ’ w ŭğ ו AKT/mTOR מ ‴ Ά ɔ ɔ ΎĄ ‴ ɞ Ά ɔ ɔ ΎĄ ‴ ę Ά ’ w ŭğ ו Ỉ ΎĄ ה miR 100 ң Ά ۱ ~ ‴ ΄Y Ă [34] ɟ ŭğ ж Ψ ה ΎĄ miR 100 ¨E Ђ Ђ ה miR 100 ŭğ ж ה ۱ Ψ Ə ’ Ж ж Ћ [35] ɟ

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ǫ̈ Ƀ ̄ Ђ miRNA ẇ Ђ miRNA ŭğ ‴ ̂ Ə ɟ miRNA ל Ђ ж Ћ miRNA ς ε ה Ė Ά ~ w Ђ ɟ miR 100 ŭğ ж ˘ Ψ ΄Y ΐ ‴ ɞɛ̆ H ɞ ۱ ŭğ ה ה Ψ ה Ă Ə ɟ ŭğ ж ˜ ɞ ɞt ɞ Ψ Ă Њ miR 100 ẇ ך Ђ[m] З ė ж Ћ miR 100 ŭğ Ψ Ђ Ấ Ђ ɟ miR 100 ‴ c ŭğ Ψ ̀Ω ŭğ Y ו ɔ ~ ς Ό Ђ ώ ’ Ж ε ã̃ ɟ ε Ђ Ė ו ىئ Ђ ж ה ה ΎĄ ж Ћ [m] miR 100 ’ Ά ę ΎĄ ɟ ה Њ miR 100 ώ щ Њ ж Ấ miR 100 ŭ̃ ΎĄ Њ ה ŭğ Ж ε[m] ~ ɟ

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