向奋战在抗疫一线的广大医务工作者致敬！

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Quantitative detection of myocardial edema in acute myocardial infarction based on T2 mapping

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【Abstract】Objective To investigate the clinical significance of quantitative detection of myocardial edema in acute myocardial infarction based on T2 mapping. Methods From July 2018 to February 2019, a total of 20 patients (observation group) who underwent cardiac MRI after interventional therapy in the People’s Hospital of Wenzhou were enrolled. Another 20 healthy volunteers were selected as the control group. The image data of the observation group were collected, and the image data were post-processed. The T2 value, edema area, and microcirculation obstacle area of the infarcted myocardium and its contralateral normal myocardium were measured and recorded by the image information. The infarcted myocardium and the contralateral normal myocardium were recorded. The T2 values were compared with the cardiac MRI, cardiac function, serological markers and heart failure related products of the two groups were compared. Results The patients in the observation group underwent self-comparison between infarcted myocardium and normal myocardium. The T2 value of the distal infarcted myocardium was (90.14 ± 6.51) ms, which was greater than that of the normal myocardium [(60.71 ± 5.15) ms], the difference was statistically significant (t = 8.49, P < 0.05). The number of myocardial microvascular obstruction (MVO) in the observation group was 17 cases, compared with 0 cases in the control group, the difference was statistically significant (χ^2 = 41.45, P < 0.05). Observation group left ventricular end-diastolic volume of the observation group was 54.1 ± 11.2 mL, which was higher than that of the observation group [(72.4 ± 15.1) mL], the difference was statistically significant (t = 12.51, P < 0.05). The T2 value of the observation group
was (69.4 ± 6.4) ms, which was higher than that of the control group [(55.2 ± 11.4) ms] (t = 11.98, P < 0.05). The degree of myocardial delayed imaging (LGE) in the observation group was 13%, which in the control group was 0%, the difference was statistically significant (Z = 27.62, P < 0.05). T2 mapping showed that myocardial infarction sensitivity and positive predictive value were higher, but its specificity was relatively low. **Conclusion** Quantitative T2 mapping has high clinical value in the evaluation of myocardial edema after acute myocardial infarction. T2 mapping can be used to analyze the extent of lesions in patients with acute myocardial infarction.

**Key words** Magnetic resonance imaging; Myocardial infarction; Myocardial ischemia; Edema; Creatine kinase; Stroke volume; Troponin; Cardiac imaging techniques

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【摘要】目的 分析住院患者梅毒抗体感染及分布情况，为梅毒预防和控制提供参考依据。方法 采用梅毒螺旋体抗体酶联免疫吸附试验（TP-ELISA）对太仓市第一人民医院2015年1月至2017年11月住院患者80478例进行梅毒抗体筛查，筛选阳性者用梅毒螺旋体明胶颗粒凝集试验（TPPA）确认，用梅毒甲苯胺红不加热血清反应素试验（TRUST）确定滴度，对检测结果进行分析。结果 80478例住院患者TP-ELISA法初筛阳性1326例（TPPA确认阳性1223例，弱阳性101例，阴性2例）。2015年、2016年、2017年TP-ELISA阳性率分别为1.62%（445/27394）、1.72%（490/28412）和1.58%（389/24672），差异无统计学意义（P＞0.05）。男、女患者阳性率分别为2.02%（689/33985）、1.37%（635/46479），差异有统计学意义（χ²=52.91，P=0.00）。≤18岁、18～59岁、59～79岁、≥79岁患者阳性率分别为0.32%（7/2161）、1.44%（765/53001）、2.31%（488/2163）和1.50%（62/4153），59～79岁阳性率最高，与其他三组差异均有统计学意义（χ²=37.08, 67.05, 10.80, 全P<0.01）。TP-ELISA阳性患者中，TRUST效价阳性患者占54.90%（728/1326），效价≥1：8占36.50%（484/1326），其他占8.44%（112/1326）。结论住院患者梅毒检测男性阳性率高于女性，≥59岁阳性率最高，老年病例增加较快，应重视梅毒的防治工作，有效阻止梅毒的传播。

【关键词】住院病人；梅毒；抗体；梅毒血清学诊断；酶联免疫吸附测定；凝集试验；假阳性反应；实验室技术和方法

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Detection and analysis of syphilis antibody in 80 478 cases of inpatients

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【Abstract】Objective To understand the infection and distribution of syphilis in hospitalized patients, thus to provide reference for syphilis prevention and control. Methods TP – ELISA test was used to examine early syphilis antibody, and adopted the TPPA test to validation syphilis antibody, and TRUST was used to determine the titer of syphilis antibody in 80478 hospitalized patients from January 2015 to November 2017, then the results were retrospectively analyzed. Results Among 80 478 inpatients, 1326 cases were positive by TP – ELISA test(1 223 cases positive, 101 cases weak positive and 2 cases negative by TPPA confirmed). The positive rates of TP – ELISA in different years were 1.62% (445/27394), 1.72% (490/28412) and 1.58% (389/24672), respectively, and the difference was not statistically significant (P>0.05). The positive rates of male and female patients were 2.02% (689/33985) and 1.37% (635/46479), and the difference was statistically significant (χ²=52.91, P=0.00). The positive rates of ≤18 years old, > 18~59 years old, >59~79 years old and ≥79 years old were 0.32% (7/2161), 1.44% (765/53001), 2.31% (488/2163) and 1.50% (62/4153), respectively. The highest proportion of syphilis patients was in the group of >59~79 years old, and the differences were statistically significant compared with the other groups (χ²=37.08, 67.05, 10.80, all P<0.01). Among the TP – ELISA positive patients, 54.90% (728/1326) had TRUST titer negative, 36.50% (484/1326) had titer less than 1:8, and the others had 8.44% (112/1326). Conclusion The incidence of syphilis was higher in males than in females in 80478 hospitalized patients. The highest positive rate was found in >59~79 years old group, and the number of elderly cases increased rapidly. Therefore, the effective interventions should be developed to control the transmission of syphilis according to the epidemiological features.
Keywords: Inpatients; Syphilis; Antibodies; Syphilis serodiagnosis; Enzyme-linked immunosorbent assay; Agglutination tests; False positive reactions; Laboratory techniques and procedures

Fund program: Science Education Revitalization of Health Project of Suzhou City for Yong Scholars, Jiangsu Province (KJXW2017066)

尿干化学法联合尿沉渣法用于尿液检验的临床效果观察

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【摘要】目的探讨尿干化学法联合尿沉渣法用于尿液检验的临床效果。方法选择浙江省余姚市中医医院门诊行尿常规检验的疑似尿路感染患者200例(2018年1-10月)进行前瞻性研究,采集200例患者的新鲜晨尿标本,分别采用尿干化学分析仪、尿沉渣分析仪对尿液标本进行检测,比较尿干化学法、尿沉渣法的尿常规检测指标。以尿液细菌培养结果为参照,计算和比较尿干化学法、尿沉渣法、尿干化学法+尿沉渣法对尿路感染的诊断灵敏度、特异度、准确率,再采用一致性检验,分析尿干化学法、尿沉渣法、尿干化学法+尿沉渣法与尿液细菌培养结果的一致性。结果(1)尿干化学法、尿沉渣法对尿红细胞、白细胞、透明管型等指标的检测结果比较,差异均无统计学意义(\(\chi^2=0.562,0.343,0.901,\)均\(P>0.05\))。(2)200例疑似尿路感染患者中,有157例患者经尿液细菌培养证实为尿路感染,其余43例无尿路感染。尿干化学法、尿沉渣法对尿路感染的诊断灵敏度、特异度、准确率比较,差异均无统计学意义(\(\chi^2=0.120,0.081,0.022,\)均\(P>0.05\)),但尿干化学法+尿沉渣法对尿路感染的诊断灵敏度、特异度、准确率分别为96.18%、97.67%、96.50%,均高于尿干化学法、尿沉渣法(\(\chi^2=6.497,6.081,11.923,8.219,4.962,12.858,\)均\(P<0.05\))。经一致性分析,尿干化学法+尿沉渣法对尿路感染的诊断结果与尿液细菌培养结果之间的一致性良好,Kappa值为0.854,而尿干化学法、尿沉渣法与尿液细菌培养结果之间的一致性均为中等,Kappa值分别为0.642、0.637。结论尿干化学法与尿沉渣法联合用于尿常规检验,可提高尿常规检验的准确性,有利于提高尿常规检验在尿路感染诊断中的价值。

【关键词】尿路感染;尿常规;医学检验;尿干化学法;尿沉渣法;诊断;红细胞;白细胞;透明管型

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Clinical observation on combined use of dry chemical method and urinary sediment in routine urine examination

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【Abstract】Objective To study the clinical effect of dry chemical method combined with urinary sediment in routine urine examination. Methods From January 2018 to October 2018, 200 patients with suspected urinary tract infection who underwent routine urine examination in the Traditional Chinese Medicine Hospital of Yuyao were selected for prospective study, and fresh morning urine samples were collected from 200 patients. Urine samples were detected by urine dry chemistry analyzer and urine sediment analyzer respectively, and the urine routine indicators of urine dry chemistry method and urine sediment method were compared. According to the results of urine bacterial culture, the sensitivity, specificity and accuracy of urine dry chemical method, urine sediment method and urine dry chemical method for the diagnosis of urinary tract infection were calculated and compared. Then, the consistency test was used to analyze the consistency of results of urine dry chemistry method, urine sediment method, urine dry chemical method and urine sediment method with urine bacterial culture. Results (1) There were no statistically significant differences between the results of urine dry chemical method and urine sediment method on the urine red blood cell, white blood cell, transparent tube type and other indicators (\(\chi^2=0.562,0.343,0.901,\) all \(P>0.05\)). (2) Among 200 suspected patients with urinary tract infection, 157 patients were confirmed to have urinary tract infection by urine bacterial culture, and the remaining 43 patients had no urinary tract infection. The sensitivity, specificity, accuracy of urine dry chemistry method and urine sediment method in the diagnosis of urinary tract infection had no statistically significant differences (\(\chi^2=0.120,0.081,0.022,\) all \(P>0.05\)). But the sensitivity, specificity, accuracy of urine dry chemistry method + urine sediment method in the diagnosis of urinary tract infection were 96.18%, 97.67%, 96.50%, respec-
tively, which were higher than those of the urine dry chemistry method and urine sediment method \( (\chi^2 = 6.497, 6.081, 11.923, 8.219, 4.962, 12.858, \text{all } P < 0.05) \). According to the consistency analysis, the diagnosis results of urinary tract infection by urine dry chemical method and urine sediment method were in good consistency with the results of urine bacterial culture, with the Kappa value of 0.854, while the consistency of urine dry chemical method, urine sediment method with the urine bacterial culture results were all moderate, with the Kappa value of 0.642 and 0.637, respectively. **Conclusion** The combination of urine dry chemical method and urine sediment method can improve the accuracy of urine routine examination and improve the value of urine routine examination in the diagnosis of urinary tract infection.

**Key words** Urinary tract infection; Urine routine; Medical examination; Urine dry chemistry; Urine sedimentation method; Diagnosis; Red blood cell; Leukocyte; Hyaline tube type

**Fund program**: Science and Technology Planning Project of Yuyao City, Zhejiang Province (2016YYB05)

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尿蛋白四项联合检测对高血压肾早期损伤的诊断价值

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【摘要】目的 探讨尿α1-微球蛋白(α1-mG)、尿N-乙酰-β-D-氨基葡萄糖苷酶(NAG)、尿视黄醇结合蛋白(RBP)、尿β2-微球蛋白(β2-mG)联合检测在高血压肾早期损伤中的诊断价值。方法 选取2016年6月至2018年12月滕州市中心人民医院收治的高血压肾病患者116例(HRD组)和单纯高血压患者44例(HBP组)作为研究对象,并与同期健康体检者36例(对照组)进行对照研究。HRD组和对照组分别检测尿α1-mG、NAG、RBP、β2-mG水平,采用SPSS 19.0统计软件进行统计学分析。结果 HRD组尿α1-mG、NAG、RBP、β2-mG水平分别为(4.17±2.52)mg/L、(21.62±13.45)mg/L、(2.86±1.73)mg/L、(1.76±0.95)mg/L,对照组分别为(0.38±0.15)mg/L、(0.93±0.62)mg/L、(0.31±0.16)mg/L、(0.38±0.38)mg/L,尿α1-mG、NAG、RBP、β2-mG的阳性率分别为(41.77±24.21)%、(22.60±13.24)%、(20.18±11.35)%、(60.12±7.71)%。P<0.05。结论 尿α1-mG、NAG、RBP、β2-mG水平联合检测更有利于高血压肾早期损伤的临床诊断,具有一定的临床应用价值。

【关键词】高血压; 尿蛋白; 肾早期损伤; α1-微球蛋白; N-乙酰-β-D-氨基葡萄糖苷酶; 视黄醇结合蛋白; β2-微球蛋白; 联合检测

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Diagnostic value of combined detection of four – item urinary protein for early hypertensive kidney injury

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【Abstract】Objective To investigate the diagnostic value of combined detection of urine α1-microglobulin (α1-mG), N-acetyl-β-D-glucosaminidase (NAG), retinol binding protein (RBP) and β2-microglobulin (β2-mG) for early hypertensive kidney injury. Methods From June 2016 to December 2018, 116 hypertension patients with renal damage (HRD group) and 44 cases with simple hypertension (HBP group) were selected in the Central People’s Hospital of Tengzhou in this study. And 36 cases of healthy people during the same period were selected as the control group. One hundred and sixteen cases of the HRD group were divided into I ~ II group...
The concentrations of α1- mG, NAG, RBP and β2- mG in urine were detected in patients and healthy people respectively. SPSS 19.0 software was used to perform statistical analysis. **Results** The concentrations of urine α1- mG, NAG, RBP, β2- mG in the HRD group were (41.77 ± 24.21) mg/L, (22.60 ± 13.24) U/L, (2.86 ± 1.73) mg/L, (1.76 ± 0.95) mg/L, respectively, which in the HBP group were (12.49 ± 8.10) mg/L, (13.45 ± 8.61) U/L, (0.31 ± 0.16) mg/L, (0.38 ± 0.38) mg/L, respectively, which in the control group were (4.37 ± 2.52) mg/L, (6.12 ± 3.57) U/L, (0.29 ± 0.17) mg/L, (0.28 ± 0.15) mg/L, respectively. The concentrations of urine α1- mG, NAG, RBP, β2- mG in the HRD group were significantly higher than those in the HBP group (t = 4.07, 4.25, 4.09, 4.03, all P < 0.05) and the control group (t = 3.15, 4.94, 2.49, 2.61, all P < 0.05). The urine levels of α1- mG, NAG, RBP, β2- mG in phase I – II group were (21.62 ± 13.45) mg/L, (21.96 ± 12.49) U/L, (0.5 ± 0.47) mg/L, (0.93 ± 0.62) mg/L, respectively, which in the phase III – V group were (64.11 ± 60.12) mg/L, (23.32 ± 14.11) U/L, (5.48 ± 4.77) mg/L, (2.68 ± 2.55) mg/L, respectively. The concentrations of urine α1- mG, NAG, RBP and β2- mG in I – II group (t = 5.08, 4.99, 2.96, 1.66, all P < 0.05) and III – V group (t = 3.95, 4.81, 4.33, 3.74, all P < 0.05) were significantly higher than those in the control group. The levels of α1- mG, RBP and β2- mG in group III – V were higher than those in group I – II (t = 5.37, 8.11, 4.52, all P < 0.05). The positive detection rates of α1- mG, NAG, RBP, β2- mG and combination test in phase I – II group were 70.5%, 77.0%, 19.7%, 60.7%, 91.8%, respectively, which in the phase III – V group were 81.8%, 81.8%, 69.1%, 69.1% and 96.4%, respectively. The positive rate of urine α1- mG, NAG, RBP and β2- mG combination test was significantly higher than that of the single detection (phase I – II group: χ² = 7.71, 3.99, 61.4, 14.65; phase III – V group: χ² = 4.58, 4.58, 12.47, 12.47; all P < 0.05). **Conclusion** Urine α1- mG, NAG, RBP and β2- mG are important biochemical indicators in patients with early hypertensive kidney injury. The combined detection of the four tests has high diagnostic value in the diagnosis of early hypertensive nephropathy.

**Key words** Hypertension; Urine protein; Early hypertensive kidney injury; α1- microglobulin; N- acetyl- β- D- glucosaminidase; Retinol binding protein; β2- microglobulin; Combined detection

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经颅多普勒超声联合颈动脉超声检查对椎-基底动脉狭窄的诊断价值

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【摘要】 目的 探讨经颅多普勒超声(TCD)联合颈动脉超声检查对椎-基底动脉狭窄的临床诊断价值。方法 选择2016年3月至2018年12月诸暨市人民医院收治的高度怀疑为椎-基底动脉狭窄患者147例,对患者进行TCD联合颈动脉超声检查,同时进行X线电子计算机断层扫描血管成像(CTA)检查,以CTA检查结果为金标准,分析TCD联合颈动脉超声检查对椎-基底动脉狭窄诊断的准确率。结果 以CTA检查为诊断金标准,分析TCD联合颈动脉超声检查对椎动脉狭窄诊断灵敏度86.42%、特异性89.39%、阳性预测值90.91%、阴性预测值84.29%;对右侧椎动脉诊断灵敏度80.26%、特异性90.14%、阳性预测值89.71%、阴性预测值81.01%;对基底动脉诊断灵敏度81.69%、特异性93.42%、阳性预测值92.06%、阴性预测值84.52%。TCD联合颈动脉超声检查与CTA对左侧椎动脉、右侧椎动脉及基底动脉狭窄程度诊断比较差异均无统计学意义(Z=-0.360、-0.851、-0.828,均P＞0.05)。结论 TCD联合颈动脉超声检查作为椎-基底动脉狭窄患者的有效筛查手段,有助于患者病情的检测以及指导临床治疗。

【关键词】 超声检查,多普勒,经颅; 超声检查,多普勒,彩色; 基底动脉; 椎动脉; 颈动脉; X线电子计算机断层扫描血管成像; 颅内动脉粥样硬化性狭窄

Clinical value of transcranial Doppler ultrasonography combined with carotid ultrasonography in the diagnosis of vertebral – basilar artery stenosis

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【Abstract】 Objective To investigate the clinical value of transcranial Doppler ultrasound(TCD) combined with carotid ultrasound in the diagnosis of vertebral – basilar artery stenosis. Methods From March 2016 to December 2018, 147 patients with suspected verteobasilar artery stenosis admitted to the People's Hospital of Zhuji were selected. TCD combined with carotid artery ultrasonography were used to diagnose verteobasilar artery stenosis, and X – ray computed tomography angiography (CTA) was performed. The diagnostic accuracy of TCD combined with carotid artery ultrasonography for verteobasilar artery stenosis was analyzed based on the results of CTA. Results The diagnostic value of TCD combined with carotid ultrasound for verteobasilar artery stenosis was analyzed by using CTA as diagnostic gold standard. The diagnostic sensitivity for left vertebral artery was 86.42%, specificity was 89.39%, positive predictive value was 90.91%, negative predictive value was 84.29%. The diagnostic sensitivity for right vertebral artery was 80.26%, specificity was 90.14%, positive predictive value was 89.71%, negative predictive value was 81.01%. The sensitivity, specificity, positive predictive value and negative predictive value for basilar artery were 81.69%, 93.42%, 92.06% and 84.52% respectively. There were no statistically significant differences between TCD combined with carotid ultrasound and CTA in the diagnosis of left vertebral artery, right vertebral artery and basilar artery stenosis (Z = −0.360, −0.851, −0.828, all P > 0.05). Conclusion TCD combined with carotid ultrasonography is an effective screening method for patients with verteobasilar artery stenosis, which is helpful to the detection of patients’ condition and the guidance of clinical treatment, and is worthy of clinical application.

【Key words】 Ultrasonography, doppler, transcranial; Ultrasonography, doppler, color; Basilar artery; Vertebral artery; Carotid arteries; X – ray computed tomography angiography; Intracranial atherosclerotic stenosis

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内皮细胞抑制素和血管抑素在翼状胬肉组织中的表达及临床意义

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【摘要】目的 探讨内皮细胞抑制素 (ES) 和血管抑素 (AS) 在翼状胬肉组织中表达的临床意义。方法 选择 2016 年 1 月至 2018 年 12 月义乌市中医院眼科手术切除的翼状胬肉组织 60 例 (60 眼) 及对侧健康人球结膜组织 60 例 (60 眼)。苏木精-伊红染色法 (HE) 染色观察翼状胬肉组织形态, 测量翼状胬肉组织中 ES 和 AS 蛋白水平。结果 HE 染色: 健康球结膜组织基质层为结缔组织, 上皮层为柱状上皮。翼状胬肉基质层见大量新生血管, 成纤维细胞、胶原纤维、血管周围见炎性细胞浸润, 上皮呈不同程度增生。翼状胬肉组织中 ES 和 AS 蛋白水平 [(0.35 ± 0.12), (0.62 ± 0.17)] 均高于对照组 [(0.13 ± 0.08), (0.16 ± 0.09)] (t = 11.816, 18.524, P = 0.000, 0.000)。复发组翼状胬肉组织中 ES 和 AS 蛋白水平 [(0.63 ± 0.15), (0.87 ± 0.21)] 均高于初发组 [(0.22 ± 0.11), (0.45 ± 0.16)] (t = 17.073, 12.323, P = 0.000, 0.000)。翼状胬肉组织中 ES 与 AS 呈正相关 (r = 0.571, P = 0.000)。结论 翼状胬肉组织中 ES 和 AS 水平升高, ES 和 AS 可能参与翼状胬肉的发生, 复发过程。

【关键词】翼状胬肉; 抑制素类; 血管抑素类; 内皮细胞; 复发

Expression and clinical significance of endostatin and angiostatin in pterygium

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【Abstract】Objective To investigate the expression and clinical significance of endostatin (ES) and angiostatin (AS) in pterygium. Methods From January 2016 to December 2018, 60 cases (60 eyes) of pterygium tissue and 60 cases (60 eyes) of normal human conjunctival tissue were selected from the eye surgery of Traditional Chinese Medicine Hospital of Yiwu. HE staining was used to observe the morphological changes of pterygium and normal conjunctival tissue. Western blot was used to measure ES and AS protein levels in the tissues of pterygium group and control group. Results HE staining showed that in the normal bulbar conjunctival tissue, the stromal layer was connective tissue and the epithelial layer was columnar epithelium; in the pterygium, the basal layer had a large number of new blood vessels, fibroblasts, collagen fibers, and inflammatory cells infiltrated around the blood vessels; the epithelium showed different degrees of hyperplasia. The protein levels of ES and AS in pterygium tissues [(0.35 ± 0.12), (0.62 ± 0.17)] were higher than those in the control group [(0.13 ± 0.08), (0.16 ± 0.09)] (t = 11.816, 18.524, P = 0.000, 0.000). The protein levels of ES and AS in the pterygium tissues of the recurrent group [(0.63 ± 0.15), (0.87 ± 0.21)] were higher than those in the initial group [(0.22 ± 0.11), (0.45 ± 0.16)] (t = 17.073, 12.323, P = 0.000, 0.000). There was positive correlation between ES and AS in pterygium (r = 0.571, P = 0.000). Conclusion The levels of ES and AS in pterygium tissue are increased, and ES and AS may be involved in the occurrence and recurrence of pterygium.

【Key words】Pterygium; Inhibins; Angiostatins; Endothelial cells; Recurrence

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原发性高血压患者外周血微小 RNA-126、微小 RNA-155、Klotho 蛋白、转化生长因子 β1 蛋白表达及临床意义

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【摘要】目的 探讨原发性高血压患者外周血微小 RNA（microRNA）-126, microRNA-155, Klotho 蛋白和转化生长因子 β1 (TGF-β1) 蛋白表达的意义。方法 选择丽水市中心医院 2015 年 12 月至 2018 年 12 月收治的原发性高血压患者 80 例为研究对象; 另选择丽水市中心医院 2015 年 12 月至 2018 年 12 月健康体检者 80 例为对照组。采用反转录聚合酶链式反应 (RT-PCR) 法检测 microRNA-126 和 microRNA-155 表达; 采用酶联免疫吸附法 (ELISA) 法检测 Klotho 蛋白和 TGF-β1 蛋白表达。结果 高血压组外周血 microRNA-126 (0.23 ± 0.07), microRNA-155 (0.84 ± 0.14), 均低于对照组的 (1.16 ± 0.24) 和 (1.37 ± 0.21), 差异均有统计学意义 (t = 33.273, 18.782, 均 P < 0.05); 高血压组血清 Klotho 蛋白 (123.42 ± 9.47) ng/L, 低于对照组的 (143.56 ± 14.68) ng/L, 差异均有统计学意义 (t = 408.97 ± 25.13) ng/L, 高于对照组的 (408.97 ± 25.13) ng/L, 差异均有统计学意义 (t = 33.273, 18.782, 均 P < 0.05)。结论 原发性高血压患者外周血 microRNA-126 和 microRNA-155 表达下调, Klotho 蛋白下调及 TGF-β1 蛋白上调, 对临床诊疗有一定的指导意义。

【关键词】 高血压; 微小 RNA-126; 微小 RNA-155; Klotho 蛋白; 转化生长因子 β1

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Expression and clinical significance of microRNA -126, microRNA -155, Klotho protein and TGF – β1 protein in peripheral blood of patients with essential hypertension

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【Abstract】Objective To investigate the expression of microRNA – 126, microRNA – 155, Klotho protein and transforming growth factor – β1 (TGF – β1) in peripheral blood of patients with essential hypertension. Methods From December 2015 to December 2018, 80 patients with essential hypertension admitted to Lishui Central Hospital were selected in the study, and 80 healthy people from Lishui Central Hospital from December 2015 to December 2018 were selected as the control group. The expressions of microRNA – 126 and microRNA – 155 were detected by RT – PCR, and the expressions of Klotho and TGF – β1 were detected by ELISA. The changes of systolic and diastolic blood pressure, the expressions of microRNA – 126 and microRNA – 155 in peripheral blood, Klotho protein and TGF – β1 protein were compared between the two groups. Results The expression of microRNA – 126 (0.23 ± 0.07) and microRNA – 155 (0.84 ± 0.14) in peripheral blood of the hypertension group was lower than that of the control group [(1.16 ± 0.24) and (1.37 ± 0.21)] (t = 33.273, 18.782, all P < 0.05). The serum levels of Klotho protein in the hypertension group [(123.42 ± 9.47) ng/L] was lower than that in the control group [(143.56 ± 14.68) ng/L], while the serum level of TGF – β1 protein the hypertension group [(561.32 ± 58.39) ng/L] was higher than that in the control group [(408.97 ± 25.13) ng/L] (t = 408.97 ± 25.13), allP < 0.05). Conclusion The expression of microRNA – 126 and microRNA – 155 in peripheral blood of patients with essential hypertension is down-regulated, and the expression of Klotho protein and TGF – β1 protein is up-regulated, which has certain guiding significance for clinical diagnosis and treatment.

【Key words】 Hypertension; MicroRNA – 126; MicroRNA – 155; Klotho protein; Transforming growth factor β1

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高血压脑出血患者血清 miR-126 水平变化及临床意义

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【摘要】目的 探讨高血压性脑出血患者血清 miR-126 水平，阐明其在高血压脑出血中的意义。方法选择杭州医学院附属临安人民医院神经外科2015年1月至2018年12月收治的高血压脑出血患者60例为观察组，同期在该院健康体检的60例为对照组。采用逆转录-聚合酶链反应（RT-PCR）测定血清 miR-126 水平。采用酶联免疫吸附试验（ELISA）测定血清 C 反应蛋白（CRP）、肿瘤坏死因子 α (TNF-α)、核转录因子 κB（NF-κB）水平。结果观察组血清 miR-126 水平低于对照组[(0.46 ± 0.11)μmol/L, t = 24.562, P < 0.05]，血清 CRP, TNF-α, NF-κB 水平均高于对照组[(8.74 ± 0.69) μg/L, (3.98 ± 0.61) μg/mL, (62.43 ± 8.26) μg/L]，(19.73 ± 1.02) μmol/L, (4.92 ± 0.87) μmol/L, t = 40.034, 22.902, 85.570, 均 P < 0.05]。不同严重程度高血压脑出血患者(轻、中、重度组)血清 miR-126 和 CRP, TNF-α, NF-κB 水平比较差异均有统计学意义[(0.57 ± 0.09), (0.44 ± 0.12), (0.36 ± 0.11), (6.91 ± 0.72) μg/mL, (8.63 ± 0.67) mg/L, (9.14 ± 0.75) mg/L, (53.16 ± 8.19) μg/L, (62.57 ± 8.33) μg/L, (70.38 ± 8.09) μg/L, (12.49 ± 0.97) μmol/L, (19.58 ± 1.11) μmol/L, (25.64 ± 1.05) μmol/L, F = 14.433, 41.379, 17.796, 62.393, 均 P < 0.05]。随着严重程度的增加，血清 miR-126 水平降低，血清 CRP, TNF-α, NF-κB 水平升高。预后不良组血清 miR-126 水平低于预后良好组[(0.53 ± 0.10), (0.38 ± 0.12), t = 5.279, P < 0.05]，预后不良组血清 CRP, TNF-α, NF-κB 水平均高于预后良好组[(7.85 ± 0.64) mg/L, (9.16 ± 0.73) mg/mL, (51.07 ± 8.32) μg/L, (73.26 ± 8.17) μg/L, (14.73 ± 1.08) μmol/L, (26.52 ± 0.99) μmol/L, F = 7.392, 10.317, 43.424, 均 P < 0.05]。高血压脑出血患者脑水肿面积与血清 miR-126 呈负相关(r = -0.623, P < 0.05)，与血清 CRP, TNF-α, NF-κB 均呈正相关(r = 0.581, 0.618, 0.642, 均 P < 0.05)。高血压脑出血患者血清 miR-126 与 CRP, TNF-α, NF-κB 均呈负相关(r = -0.593, -0.624, -0.618, 均 P < 0.05)。结论高血压脑出血患者血清 miR-126 水平降低，其可能通过参与炎性反应参与高血压脑出血发病过程，检测血清 miR-126 水平在高血压脑出血病情严重程度及预后评估中具有重要价值。

【关键词】颅内出血,高血压性；微 RNAs；C 反应蛋白；肿瘤坏死因子 α；核转录因子 κB
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Serum level of miR-126 in patients with hypertensive intracerebral hemorrhage and its clinical significance

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【Abstract】Objective To investigate the serum level of miR-126 in patients with hypertensive intracerebral hemorrhage and to elucidate its clinical significance in hypertensive cerebral hemorrhage. Methods From January 2015 to December 2018, 60 patients with hypertensive cerebral hemorrhage were selected as observation group, and 60 healthy subjects were selected as control group in the People’s Hospital of Lin’an Affiliated to Hangzhou Medical College. The serum levels of miR-126 were determined by reverse transcription – polymerase chain reaction (RT-PCR). The serum levels of C – reactive protein (CRP), tumor necrosis factor – α (TNF-α) and nuclear factor kappa B (NF-κB) were measured by enzyme – linked immunosorbent assay (ELISA). Results The serum level of miR-126 in the observation group was lower than that in the control group [(0.46 ± 0.11) vs. (1.00 ± 0.13), t = 24.562, P < 0.05], and the serum levels of CRP, TNF-α and NF-κB were higher than those in the control group [(8.74 ± 0.69) μg/L, (3.98 ± 0.61) μg/mL, (62.43 ± 8.26) μg/L, (19.73 ± 1.02) μmol/L, (4.92 ± 0.87) μmol/L, t = 40.034, 22.902, 85.570, all P < 0.05]. There were statistically significant differences in serum miR-126, CRP, TNF-α, NF-κB levels among patients with different severity of
hypertensive intracerebral hemorrhage: (0.57 ± 0.09) vs. (0.44 ± 0.12) vs. (0.36 ± 0.11), (6.91 ± 0.72) mg/L vs. (8.63 ± 0.67) mg/L vs. (9.14 ± 0.75) mg/L, (53.16 ± 8.19) μg/L vs. (62.57 ± 8.33) μg/L vs. (70.38 ± 8.09) μg/L, (12.49 ± 0.97) μmol/L vs. (19.58 ± 1.11) μmol/L vs. (25.64 ± 1.05) μmol/L, F = 14.433, 41.379, 17.796, 623.893, all P < 0.05], with the severity increased, the serum miR-126 level decreased, serum CRP, TNF-α and NF-κB levels increased. The serum miR-126 level in patients with hypertensive cerebral hemorrhage of the poor prognosis group was lower than that of the good prognosis group [(0.53 ± 0.10) vs. (0.38 ± 0.12), t = 5.279, P < 0.05], and the serum levels of CRP, TNF-α and NF-κB in the poor prognosis group were higher than those in the good prognosis group [(7.85 ± 0.64) mg/L vs. (9.16 ± 0.73) mg/L, (51.07 ± 8.32) μg/L vs. (73.26 ± 8.17) μg/L, (14.73 ± 1.08) μmol/L vs. (26.52 ± 0.99) μmol/L, t = 7.392, 10.317, 43.424, all P < 0.05]. The area of brain edema in patients with hypertensive intracerebral hemorrhage was negatively correlated with serum miR-126 (r = -0.623, P < 0.05), and positively correlated with serum CRP, TNF-α and NF-κB (r = 0.581, 0.618, 0.642, all P < 0.05). The serum miR-126 level was negatively correlated with CRP, TNF-α and NF-κB in patients with hypertensive intracerebral hemorrhage (r = -0.593, -0.624, -0.618, all P < 0.05).

**Conclusion** The serum level of miR-126 is reduced in patients with hypertensive intracerebral hemorrhage, which may participate in the pathogenesis of hypertensive cerebral hemorrhage by participating in inflammatory reaction. The detection of serum miR-126 level has great value in evaluation of the severity and prognosis of hypertensive cerebral hemorrhage.

**Key words** Intracranial hemorrhage, hypertensive; MicroRNAs; C-reactive protein; Tumor necrosis factor-α; NF-κB

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Diagnostic value of serum microRNA21 and tumor markers CEA, CYFRA21 – 1 and NSE in early non–small cell lung cancer

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Abstract

Objective To study the diagnostic value of serum microRNA21 and tumor markers CEA, CYFRA21 – 1 and NSE in early non–small cell lung cancer (NSCLC).

Methods From January 2018 to March 2019, 22 patients with NSCLC in Daqing Longnan Hospital were selected as the study group, and 22 people who underwent health examination in our hospital during the same period were selected as the control group. The levels of serum microRNA21, major tumor markers and the relationship between pathological types and markers were observed and analyzed.

Results The serum levels of miRNA – 21 (2.15 ± 0.9), CEA [(34.1 ± 4.9) ng/mL], NSE [(27.1 ± 2.2) ng/mL], and CYFRA21 – 1 [(12.1 ± 1.2) ng/mL] in the study group were higher than those in the control group (t = 6.524, 27.392, 23.339, 27.685, all P < 0.000). Contrast, the levels of miRNA – 21 (12.8 ± 5.2) ng/mL, CEA (38.1 ± 17.9) ng/mL, CYFRA21 – 1 (16.8 ± 6.2) ng/mL, and NSE (26.9 ± 10.2) ng/mL were significantly lower than those in the control group (t = 0.423, 0.247, 0.070, all P > 0.05). The serum levels of miRNA – 21 (1.88 ± 1.4), CEA (30.1 ± 19.9) ng/mL, CYFRA21 – 1 (12.8 ± 5.2) ng/mL in adenocarcinoma patients were lower than those in patients with squamous cell carcinoma, and the level of NSE (26.1 ± 3.2) ng/mL was higher than that of patients with squamous cell carcinomas (t = 1.588, 1.912, 0.260, 0.247, 0.070, all P < 0.05). The serum levels of miRNA – 21 (2.58 ± 0.96), CEA (38.1 ± 17.9) ng/mL, CYFRA21 – 1 (16.8 ± 6.2) ng/mL, and NSE (26.9 ± 10.2) ng/mL were significantly lower than those in NSCLC patients with III – IV stage (t = 0.070, 0.247, 0.070, all P > 0.05). The serum levels of miRNA – 21 (2.58 ± 0.96), CEA (38.1 ± 17.9) ng/mL, CYFRA21 – 1 (16.8 ± 6.2) ng/mL, and NSE (26.9 ± 10.2) ng/mL were significantly lower than those in NSCLC patients with I – II stage (t = 0.070, 0.247, 0.070, all P > 0.05). The serum levels of miRNA – 21 (2.58 ± 0.96), CEA (38.1 ± 17.9) ng/mL, CYFRA21 – 1 (16.8 ± 6.2) ng/mL, and NSE (26.9 ± 10.2) ng/mL were significantly lower than those in NSCLC patients with III – IV stage (t = 0.070, 0.247, 0.070, all P > 0.05).
Conclusion The combined examination of serum microRNA – 21 and tumor markers CEA, CYFRA21 – 1 and NSE in patients with NSCLC can effectively confirm the diagnosis, which is very important for the diagnosis, treatment and prognosis of patients. This diagnosis can be the first choice for patients with NSCLC.

【Key words】 Carcinoma, non – small – cell lung; MicroRNA – 21; Carcinoembryonic antigen; Cytokeratin 19 – fragments; Neuron specific enolase; Early stage; Diagnostic value

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急性心力衰竭患者血浆 N 末端 B 型利钠肽前体、超敏 C 反应蛋白、肌钙蛋白 I 和糖类抗原 125 与心功能的相关性分析

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【摘要】目的 探讨急性心力衰竭患者血浆 N 末端 B 型利钠肽前体 (NT-proBNP)、超敏 C 反应蛋白 (hs-CRP)、肌钙蛋白 I (cTn I) 和糖类抗原 125 (CA125) 与心功能的相关性。方法 选择杭州市大江东医院 2017 年 5 月至 2019 年 5 月收治的急性心力衰竭患者 97 例为观察组，根据纽约心脏协会 (NYHA) 心功能分级，Ⅱ级组 29 例，Ⅲ级组 51 例，Ⅳ级组 17 例；另选择该院 2017 年 5 月至 2019 年 5 月健康体检者 50 例为对照组。比较两组血浆 NT-proBNP、hs-CRP、cTn I 和 CA125 水平变化及心功能指标 [左心室舒张末期内径 (LVEDD) 和左心室射血分数 (LVEF)] 变化；比较不同心功能分级组血浆 NT-proBNP、hs-CRP、cTn I 和 CA125 水平变化及 LVEDD 和 LVEF 变化；分析 NT-proBNP、hs-CRP、cTn I 和 CA125 与 LVEDD 和 LVEF 相关性。结果 观察组血浆 NT-proBNP [ (5.684±174.39) ng/L ]、hs-CRP [ (16.54±3.27) μg/L ]、cTn I [(0.43±0.13) μg/L] 和 CA125 [(83.24±15.46) ng/L] 均高于对照组 ( t = 216.813, 25.684, 19.432, 34.138, 均 P < 0.05)。观察组 LVEDD [(63.21±4.87) mm] 高于对照组 [(48.97±2.41) mm]，而 LVEF [(39.27±3.25)]% 低于对照组 [(62.87±4.36)]% ( t = 19.461, 37.008, 均 P < 0.05)。Ⅳ级组血浆 NT-proBNP [(7.368±18.201) ng/L]、hs-CRP [(24.19±4.18) mg/L]、cTn I [(0.63±0.14) μg/L] 和 CA125 [(164.52±27.48)] mg/L 均高于Ⅱ级组和Ⅲ级组 ( t = 31.109, 6.557, 5.321, 13.017, Ⅱ级组: t = 25.684, 16.54, 0.42, 15.530, 均 P < 0.05)；Ⅳ级组血浆 NT-proBNP [(5.751±18.304) ng/L]、hs-CRP [(15.98±4.56) mg/L]、cTn I [(0.41±0.15) μg/L] 和 CA125 [(87.97±18.45) ng/L] 均高于Ⅱ级组 [(348.31±145.26) ng/L]、(8.23±2.37) μg/L 和 [(28.43±12.21) mg/L] ( t = 57.893, 8.507, 5.320, 15.530, 均 P < 0.05)。Ⅳ级组 LVEDD [(67.95±5.15) mm] 高于Ⅱ级组和Ⅲ级组 (Ⅲ级组: t = 3.535, Ⅱ级组: t = 8.157, 均 P < 0.05)，而 LVEF [(34.28±2.36)]% 低于Ⅱ级组和Ⅲ级组 (Ⅲ级组: t = 6.673, Ⅱ级组: t = 10.417, 均 P < 0.05)；Ⅳ级组 LVEDD [(62.78±5.21) mm] 高于Ⅱ级组 [(57.87±3.25) mm] ( t = 4.586, P < 0.05)，而 LVEF [(39.98±3.24)]% 低于Ⅱ级组 [(45.98±4.25)]% ( t = 7.097, P < 0.05)。LVEDD 与 NT-proBNP、hs-CRP、cTn I 和 CA125 呈线性正相关；LVEF 与 NT-proBNP、hs-CRP、cTn I 和 CA125 呈线性负相关。结论 急性心力衰竭患者血浆 NT-proBNP、hs-CRP、cTn I 和 CA125 水平升高，且与心功能分级和心功能指标具有明显相关性。

【关键词】 心力衰竭； 利钠肽，脑； C 反应蛋白； 肌钙蛋白 I； CA-125 抗原； 心脏功能试验；

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Analysis of the correlation between plasma NT – proBNP, hs – CRP, cTnI, CA125 and cardiac function in patients with acute heart failure

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【Abstract】Objective To investigate the relationship between plasma N – terminal B – type natriuretic peptide precursor (NT – proBNP), hypersensitive C – reactive protein (hs – CRP), troponin I (cTn I) and carbohydrate antigen 125 (CA125) and cardiac function in patients with acute heart failure. Methods From May 2017 to May 2019, 97 patients with acute heart failure admitted to Hangzhou Dajiangdong Hospital were selected as the observation group. According to the cardiac function classification of New York Heart Association (NYHA), 29 patients were classified as grade II group, 51 patients as grade III group and 17 patients as grade IV group. Fifty healthy people were selected as control group. The changes of plasma NT – proBNP, hs – CRP, cTnI and CA125 levels, left ventricular end – diastolic diameter (LVEDD) and left ventricular ejection fraction (LVEF) were compared between the two
groups. The changes of plasma NT-proBNP, hs-CRP, cTnI and CA125 levels, as well as the changes of LVED and LVEF in the different heart function grading group were compared. The correlation between plasma NT-proBNP, hs-CRP, cTnI, CA125 and LVEDD, LVEF was analyzed. Results The plasma NT-proBNP [[(5 684. 21 \pm 174. 39) ng/L], hs-CRP [16. 54 \pm 3. 27] mg/L], cTnI [0. 43 \pm 0. 13] g/L] and CA125 [83. 24 \pm 15. 46] U/mL] in the observation group were higher than those in the control group \((t = 216. 813, 25. 684, 19. 432, 34. 138, all P < 0. 05)\).

The LVEDD in the observation group [(63. 21 \pm 4. 87) mm] was higher than that in the control group [(48. 97 \pm 2. 41) mm], and the LVEF in the observation group [(39. 27 \pm 3. 25) %] was lower than that in the control group [(62. 87 \pm 4. 36) %], the differences were statistically significant \((t = 19. 461, 37. 008, all P < 0. 05)\). The levels of NT-proBNP [7 368. 18 \pm 201. 05] ng/L], hs-CRP [24. 19 \pm 4. 18] mg/L], cTnI [(0. 63 \pm 0. 14] μg/L] and CA125 [(164. 52 \pm 27. 48] U/mL] in the grade IV group were higher than those in the grade II group and grade III group: grade III group; t = 31. 109, 6. 557, 5. 321, 13. 017; grade II group; t = 75. 873, 16. 582, 11. 755, 23. 178, all \(P < 0. 05\). The plasma NT-proBNP [(5 751. 42 \pm 180. 34] ng/L], hs-CRP [(15. 98 \pm 4. 56] mg/L], cTnI [(0. 41 \pm 0. 15] g/L] and CA125 [(87. 97 \pm 18. 45] U/mL] in the grade III group were higher than those in the grade II group [[(3 481. 34 \pm 145. 26] ng/L), (8. 23 \pm 2. 37] mg/L, (0. 25 \pm 0. 08] μg/L and (28. 43 \pm 12. 21] U/mL] \((t = 57. 893, 8. 507, 5. 320, 15. 530, all P < 0. 05)\). The LVEDD [(67. 95 \pm 5. 15] mm] in the grade IV group was higher than that in the grade II group and grade III group (grade III group; t = 3. 553, grade II group; t = 8. 157, \(P < 0. 05\)), while the LVEF [(34. 28 \pm 2. 36] %] in the grade IV group was lower than that in the grade II group and grade III group (grade III group; t = 6. 673, grade II group; t = 10. 417, all \(P < 0. 05\)). The LVEDD [(62. 78 \pm 5. 21] mm] in the grade III group was higher than that in the grade IV group [(57. 87 \pm 3. 25] mm] \((t = 4. 586, P < 0. 05)\), while the LVEF in the grade III group [(39. 98 \pm 3. 24] %] was lower than that in the grade IV group [(45. 98 \pm 4. 25] %] \((t = 7. 097, P < 0. 05)\). LVEDD was positively correlated with NT-proBNP, hs-CRP, cTnI and CA125, while LVEF was negatively correlated with NT-proBNP, hs-CRP, cTnI and CA125.

Conclusion The levels of NT-proBNP, hs-CRP, cTnI and CA125 in plasma of patients with acute heart failure are elevated, and they are significantly correlated with cardiac function grading and cardiac function indicators.

【Key words】 Heart failure; Natriuretic peptide, brain; C-reactive protein; Troponin I; CA-125 antigen; Heart function tests; Stroke volume

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二维斑点追踪技术用于左室射血分数保留的心力衰竭诊断及预后评价的临床研究

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【摘要】目的 观察二维斑点追踪技术用于左室射血分数保留的心力衰竭诊断及预后评价的临床效果。方法 选取2016年7月至2018年7月于温州市中西医结合医院就诊并接受治疗的左室射血分数降低的心力衰竭（HFNEF）患者64例和同期健康受试者64例为研究对象，研究对象均进行常规超声心动图检查和二维斑点追踪检测，记录超声血流动力学参数和二维斑点追踪应变参数，分析不同受试者组常规超声检测参数和二维斑点追踪应变参数差异情况。结果 HFNEF患者仅在E/A（0.79±0.24）和E/E’检测数值（18.93±3.41）与健康受试者（1.28±0.35）和（6.84±1.37）差异有统计学意义（t=0.384~1.628，P=0.102~0.564），而HFNEF患者心率（HR）、左房内径（LAD）、左室内径（LVD）、舒张末期室间隔厚度（LVPWD）、舒张末期左室后壁厚度（LVSAD）和左室射血分数（LVEF）及左室短轴缩短率（LVFS）等超声检测参数分别为（71.37±5.93）次/min，（35.32±4.37）mm，（47.13±5.01）mm，（9.24±1.76）mm，（9.35±1.82）mm，（63.98±5.37）%，（35.49±4.46）%与健康受试者的（70.14±5.28）次/min，（37.64±4.69）mm，（49.26±5.54）mm，（9.39±1.82）mm，（9.48±1.90）mm，（66.35±5.41）%（r=0.04~0.47）%差异均无统计学意义（t=0.384~1.628，P=0.102~0.564）；HFNEF患者左心室心尖段前间隔、前侧壁、后侧壁、下壁和后间壁、乳头肌段下壁和后间壁基底段后侧壁、下壁，后间隔左心室各节段收缩期轴向应变率（SRs）和左心室整体扭转度（ROT）均较健康受试者显著降低，而HFNEF患者左心室长轴整体收缩期最大峰值应变（GLS）（-13.52±4.18）和左心室轴向整体收缩期最大峰值应变（GCS）（-10.43±3.85）较健康受试者显著增加[（-19.89±4.61）和（-15.67±4.24）]（t=8.947~14.063，P=0.000~0.000<0.05），治疗后临床症状改善的HFNEF患者在左心室心尖段整体、乳头肌段下壁和后间壁基底段后侧壁、下壁，后间隔SRs及左心室GLS、GCS和ROT均有显著改善（r=7.258~13.193；P=0.000~0.000<0.05）；HFNEF患者二维应变（GLS、GC）检测数值与超声E/A检测数值呈负相关性，与E/E’检测数值呈负相关性（r=-0.763；P=0.004，0.012<0.05），而二维应变ROT检测结果与E/A检测数值呈正相关性，与E/E’检测数值呈正相关性（r=-0.617，-0.763；P=0.004，0.012<0.05），而二维应变ROT检测结果与E/A检测数值呈正相关性，与E/E’检测数值呈正相关性（r=-0.859，-0.759；P=0.006，0.014，P<0.05）。结论HFNEF患者左心室已出现局部心肌收缩功能损伤现象，二维斑点追踪技术对HFNEF患者心肌收缩功能变化情况的敏感度高，对HFNEF的诊断及预后评估具有较高的临床应用价值，相关临床工作者应予以重视。

【关键词】二维斑点追踪技术；超声心动图；左室射血分数保留的心力衰竭；相关性；左心室；心肌功能损伤；诊断；预后评价

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Clinical significance of two–dimensional speckle tracking technique in the evaluation of diagnosis and prognosis of heart failure with left ventricular ejection fraction preservation
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【Abstract】Objective To observe the clinical effect of two–dimensional speckle tracking technique in diagnosis and prognosis evaluation of heart failure with left ventricular ejection fraction preservation. Methods A total of 64 heart failure patients with reduced left ventricular ejection fraction (HFNEF) and 64 healthy volunteers in the Integrated Traditional Chinese and Western Medicine Hospital of Wenzhou were selected from July 2016 to July 2018. Conventional echocardiography and two–dimensional speckle tracking were performed in all subjects. The hemodynamic parameters and strain parameters of two–dimensional speckle tracking were recorded. The differences of conventional echocardiographic parameters and two–dimensional speckle tracking strain parameters in different...
subjects were analyzed. **Results** The E/A (0.79 ± 0.24) and E/E’ value (18.93 ± 3.41) in HFNEF patients had statistically significant differences compared with healthy subjects [(1.28 ± 0.35) and (6.84 ± 1.37)] \( t = 9.507, P = 0.000, 0.000 \). There were no statistically significant differences in HR, LAD, LVD, LVSD, LVPWD, LVEF and LVFS between HFNEF patients [(71.37 ± 5.93) times/min, (35.32 ± 4.37) mm, (47.13 ± 5.01) mm, (9.24 ± 1.76) mm, (9.35 ± 1.82) mm, (63.98 ± 5.37) %, (35.49 ± 4.46) %] and healthy subjects [(70.14 ± 5.28) times/min, (37.64 ± 4.69) mm, (49.26 ± 5.54) mm, (9.39 ± 1.82) mm, (9.48 ± 1.90) mm, (66.35 ± 5.41) %, (34.02 ± 4.17) %] \( t = 0.384 - 1.628; P = 0.102 - 0.564 \). In HFNEF patients, the anterior septum, anterior wall, posterior wall, inferior wall and posterior wall of apical segment of left ventricle, the inferior wall and posterior wall of papillary muscle and the posterior wall, inferior wall and posterior wall of basal segment, SRs and ROT of left ventricle were significantly lower than those of healthy subjects, while GLS (−13.52 ± 4.18) and GCS (−10.43 ± 3.85) of left ventricle in HFNEF patients were significantly higher than those of healthy subjects [(−19.89 ±4.61) and (−15.67 ± 4.24)] \( t = 8.947 ~ 14.063; P = 0.000 ~ 0.000 < 0.05 \). After treatment, the clinical symptoms of HFNEF patients improved significantly in the whole apical segment of left ventricle, inferior and posterior wall of papillary muscle segment, posterior lateral wall, inferior wall, posterior wall SRs and left ventricular GLS, GCS and ROT \( t = 7.258 ~ 13.193; P = 0.000 ~ 0.000 < 0.05 \). Two-dimensional strain GLS and GC values in HFNEF patients were negatively correlated with E/A values and positively correlated with E/E’ value \( r = -0.817, -0.763; P = 0.004, 0.012 < 0.05 \), while two-dimensional strain ROT results were positively correlated with E/A values and negatively correlated with E/E’ values \( r = -0.805, -0.759; P = 0.006, 0.014 < 0.05 \).

**Conclusion** Left ventricular systolic function damage has occurred in HFNEF patients. Two-dimensional speckle tracking technique is highly sensitive to the changes of myocardial systolic function for HFNEF patients. It has high clinical value in the diagnosis and prognosis evaluation of HFNEF. Relevant clinical workers should pay attention to it.

**Key words** Two-dimensional speckle tracking technique; Echocardiography; Heart failure with left ventricular ejection fraction preservation; Relevance; Left ventricle; Myocardial dysfunction; Diagnosis; Prognostic evaluation

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Application of synchronous arteriovenous exchange in neonatal ABO hemolysis

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【Abstract】Objective To evaluate the effect and influence of exchange transfusion on neonatal ABO hemolysis by comparing the changes of indirect bilirubin in serum and internal environment before and after exchange transfusion.

Methods A retrospective analysis of 242 cases with neonatal ABO hemolytic disease from January 2017 to October 2018 in the Children’s Hospital of Jiangxi Province was carried out. According to whether the parents signed or agreed to exchange transfusion, they were divided into two groups. The exchange group (126 cases) received routine treatment + exchange of blood, and the control group (116 cases) was only given conventional therapy (blue light + probiotics + gamma globulin). In the exchange group, peripheral venous blood was collected half an hour before the exchange of blood (T1) and half an hour after the exchange of blood (T2), while in the control group, the indirect bilirubin, platelet and blood sugar were measured at two time points of parents signing disapproval of exchange of blood (T1) and disapproval of exchange of blood and one day after the treatment (T2). Results The indirect bilirubin levels in serum of the exchange group and the control group were decreased, and the difference was statistically significant [(194.010 ± 41.065) μmol/L vs. (390.048 ± 39.058) μmol/L, t = 1507.604, (292.014 ± 39.998) μmol/L vs. (383.452 ± 42.820) μmol/L, t = 306.820, all P < 0.05]. The decrease of serum indirect bilirubin in the exchange group was more significant than that in the control group, and the difference was statistically significant [(194.010 ± 41.065) μmol/L vs. (292.014 ± 39.998) μmol/L, t = 368.267, P < 0.05]. After exchange transfusion, the levels of platelet and blood sugar were decreased significantly, and the differences were statistically significant [(390.048 ± 39.058) μmol/L vs. (350.660 ± 32.564) μmol/L, t = 5061.203, (2.965 ± 0.593) mmol/L vs. (3.490 ± 0.876) mmol/L, t = 717.817, all P < 0.05].

Conclusion The changes of blood in the exchange group are more significant than those in the control group, suggesting that synchronous arteriovenous exchange in neonatal ABO hemolysis is an effective and safe treatment method.
(5.490 ± 0.876) mmol/L, \( t = 717.817 \), all \( P < 0.05 \). Decreased platelets and blood sugar could return to normal within 3 days. **Conclusion** Exchange therapy can significantly reduce the level of bilirubin and the incidence of bilirubin encephalopathy in neonates with ABO hemolysis. Exchange therapy has certain effect on the internal environment of neonatal ABO hemolytic patients, which is easy to cause thrombocytopenia and blood sugar reduction. But the change of internal environment is temporary and reversible.

**Keywords** Neonate; ABO hemolytic disease; Hyperbilirubinemia; Phototherapy; Exchange transfusion; Curative effect; Influence; Bilirubin encephalopathy

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右美托咪定对体外循环心脏术后机械通气患者撤机安全性的临床效果

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【摘要】目的 比较右美托咪定与咪达唑仑在体外循环(CPB)心脏术后机械通气患者撤机过程中的应用安全性。方法 选择金华市人民医院2016年8月至2018年12月收治的CPB心脏术后机械通气患者51例为研究对象，按照随机数字表法分为右美托咪定组(26例)及咪达唑仑组(25例)，分别给予右美托咪定和咪达唑仑镇静治疗，分别统计两组患者机械通气时间、重症疼痛观察工具(CPOT)评分、重症监护谵妄筛查量表(ICDSC)评分、机械通气期间窦性心动过缓发生率以及撤机拔管后患者回访有无顺行性遗忘情况。并比较各组在撤机过程中镇静药物在CPB心脏术后机械通气患者中的撤机安全性及相关因素影响。结果 右美托咪定组CPOT评分[(1.04±0.45)分]显著低于咪达唑仑组[(2.24±0.83)分]，差异有统计学意义(t=−6.40，P<0.01)；右美托咪定组ICDSC评分为(0.96±0.20)分，咪达唑仑组为(1.04±0.35)分，差异无统计学意义(t=−0.99，P>0.05)；右美托咪定组机械通气时间为(29.71±17.96)h，咪达唑仑组为(26.13±20.02)h，差异无统计学意义(t=0.67，P>0.05)；机械通气镇静期间右美托咪定组发生心动过缓情况更多，差异有统计学意义(χ²=11.96，P<0.01)；撤机拔管后患者回访，右美托咪定组未发现顺行性遗忘，而咪达唑仑组全部出现顺行性遗忘。结论 与咪达唑仑组比较，撤机过程中选用右美托咪定镇静，焦虑自评量表(SAS)评分同为4分，机械通气时间较短，而且在用药期间虽有心动过缓发生，但停药后均能自行恢复，临床应用安全。

【关键词】体外循环；心脏外科手术； 呼吸； 心动过缓； 右美托咪定； 咪达唑仑

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Clinical study on the safety of dexmedetomidine withdrawal in patients undergoing mechanical ventilation after cardiopulmonary bypass in ICU

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【Abstract】Objective To compare the safety of dexmedetomidine and midazolam in weaning mechanical ventilation patients after cardiopulmonary bypass (CPB) in ICU. Methods From August 2016 to December 2018, 51 patients admitted to the People’s Hospital of Jinhua for mechanical ventilation after ICU CPB cardiac surgery were randomly divided into dexmedetomidine group and midazolam group according to the numerical table method. During mechanical ventilation, dexmedetomidine was used to sedate the study group (26 cases), and midazolam was used in the control group (25 cases). The total time of mechanical ventilation, CPOT score, ICDSC score, incidence of sinus bradycardia during mechanical ventilation were counted, and the anterograde amnesia was observed after extubation. The safety and related factors of drug withdrawal in patients undergoing mechanical ventilation after CPB surgery of two different sedations were compared and evaluated. Results Statistical analysis showed that the CPOT score of the dexmedetomidine group was (1.04±0.45) points, which was significantly lower than that of the midazolam group [(2.24±0.83) points], the difference was statistically significant between the two groups (t=−6.40, P<0.01). The ICDSC score of the dexmedetomidine group was (0.96±0.20) points, which of the midazolam group was (1.04±0.35) points, the difference was no statistically significant between the two groups (t=−0.99, P>0.05). The total time of mechanical ventilation was (29.71±17.96)h in the dexmedetomidine group and (26.13±20.02)h in the midazolam group, there was no statistically significant difference between the two groups (t=0.67, P>0.05). During mechanical ventilation sedation, the dexmedetomidine group had more bradycardia, the difference was statistically significant (χ²=11.96, P<0.01). There was no anterograde amnesia in the dexmedetomidine group, but...
all of the patients in the midazolam group had anterograde amnesia. **Conclusion** Compared with the midazolam group, the CPO'T score was lower in the dexmedetomidine sedation group with the same SAS score of 4 (superficial sedation), which in line with the principles of "deep analgesia, shallow sedation". Although bradycardia occurs during the use of drugs, it can recover spontaneously after withdrawal and is safe to use.

**Key words** Extracorporeal circulation; Cardiac surgical procedures; Respiration, artificial; Bradycardia; Dexmedetomidine; Midazolam

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论著

深度水解蛋白配方奶用于早产儿喂养的临床观察

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【摘要】目的 比较早期深度水解蛋白配方奶(eHF)喂养与标准早产儿配方奶(SPF)喂养对早产儿生长发育、喂养情况及后期变应性疾病发生情况的影响。方法 选取2018年10月至2019年4月蚌埠医学院附属蚌埠市第三人民医院新生儿重症监护病房(NICU)收治的早产儿84例为研究对象。采用随机数字表法分为观察组(42例)和对照组(42例)。观察组:出生后即用eHF喂养,喂养量达20ml/次时,改为热卡较高与早产儿奶相当的浓eHF喂养。对照组:出生后即用SPF喂养。记录比较两组头围、身长、体质量、恢复出生体质量时间、喂养不耐受发生率、新生儿坏死性小肠结肠炎(NEC)发生率,达全胃肠营养时间,住院天数;随访至纠正胎龄3个月时比较两组变应性疾病及宫外发育迟缓(EUGR)发生率。结果 观察组达全胃肠喂养时间短于对照组[(9.32±3.02)d vs. (11.25±3.70)d],喂养不耐受发生率低于对照组(11.90% vs. 30.95%),至纠正胎龄3个月内变应性疾病发生率低于对照组(4.76% vs. 19.04%),差异均有统计学意义(t=2.333, χ²=4.655, 4.086, 4.086, t=2.333, P<0.05)。结论在NICU住院期间早产儿进行深度水解奶喂养能更快的达到全胃肠营养,降低喂养不耐受的发生率,减少后期变应性疾病发生率。

【关键词】 婴儿,早产; 肠道营养; 小肠结肠炎; 坏死性; 胎儿生长迟缓; 深度水解蛋白配方; 早产儿配方奶

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Clinical observation of deep hydrolyzed protein formula used in feeding premature infants
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【Abstract】Objective To investigate the effect of feeding preterm infants with extensively hydrolyzed formula and standard preterm formula on their growth, feeding tolerance and allergic diseases. Methods From October 2018 to April 2019, 84 premature infants admitted to NICU of the Third People’s Hospital of Bengbu Affiliated to Bengbu Medical College were selected and randomly divided into observation group and control group, with 42 cases in each group. In the observation group, the preterm infants were fed with extensively hydrolyzed formula. When each feeding amount reached 20 ml, they were fed with concentrated extensively hydrolyzed formula that calorie was equivalent to standard preterm formula. In the control group, the preterm infants were fed with standard preterm formula. The head circumference, length and weight, the time of birth weight recovery, feeding intolerance, the incidence of neonatal necrotizing enterocolitis(NEC), the time to reach full enteral feeding, the length of hospitalization were compared between the two groups. The patients were followed up for 3 months in corrected age, the incidence rates of allergic diseases and extraterine growth retardation (EUGR) were compared between the two groups. Results Compared with the control group, the observation group had shortened total parenteral nutrition time [(9.32±3.02)d vs. (11.25±3.70)d, t=2.333, P<0.05], reduced incidence of feeding intolerance(11.9% vs. 30.95%, t=4.655, P<0.05), reduced incidence of allergic diseases in corrected age of 3 months(4.76% vs. 19.04%, t=4.086, P<0.05), the differences were statistically significant. There were no statistically significant differences in head circumference, length and height growth, the time of birth weight recovery, incidence of NEC, length of hospitalization, and EUGR at corrected age of 3 months (all P<0.05). Conclusion Extensively hydrolyzed formula can shorten the time to total parenteral nutrition, reduce the incidence of feeding intolerance and the incidence of allergic diseases in...
corrected age of 3 months.

【Key words】 Infant, premature; Enteral nutrition; Enterocolitis, necrotizing; Fetal growth retardation; Extensively hydrolyzed formula; Neonatal necrotizing enterocolitis

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微型种植体支抗用于青少年口腔正畸治疗的作用及安全性、依从性研究

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【摘要】目的 探讨微型种植体支抗在青少年口腔正畸治疗中的作用及安全性、依从性。方法选取宁波市医疗中心李惠利医院口腔科2017年3月至2019年3月收治的行口腔正畸治疗的青少年患者50例为研究对象, 采用随机数字表法分为对照组和观察组, 每组25例。对照组给予常规矫正治疗, 观察组给予微型种植体支抗治疗。观察比较两组患者治疗有效率、上中切牙倾角差和牙齿凸距差、磨牙位移, 以及安全性、不良反应和依从性的差异。结果 两组患者性别、年龄等差异均无统计学意义 (均 P>0.05)。观察组上中切牙倾角差、牙齿凸距差和磨牙位移差距改善情况均明显优于对照组, 差异均有统计学意义 (t=11.328, 20.011, 17.336, 均 P<0.05)。观察组口腔炎症、软组织水肿、矫正不适等不良反应发生率 (8%) 低于对照组 (28%), 差异有统计学意义 (χ²=10.225, P<0.05); 观察组患者依从性 (96%) 明显高于对照组 (80%), 差异有统计学意义 (χ²=19.316, P<0.05)。结论 微型种植体支抗用于青少年口腔正畸的临床治疗效果好, 安全性高, 且患者依从性好, 值得在临床推广。

【关键词】微型种植体支抗; 正畸学; 青少年; 口腔功能; 不良反应; 疗效; 安全性; 依从性
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The effect, safety and compliance of micro-implant anchorage in adolescent orthodontic treatment

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【Abstract】Objective To investigate the effect, safety and compliance of micro-implant anchorage in adolescent orthodontic treatment. Methods A total of 50 adolescent patients who underwent orthodontic treatment from March 2017 to March 2019 in the Department of Stomatology, Li Huili Hospital of Ningbo Medical Center were selected and randomly divided into control group and observation group according to the digital table, with 25 cases in each group. The control group received conventional corrective treatment, and the observation group received micro-implant anchorage therapy. The treatment efficacy, upper incisor dip angle and tooth convexity difference, molar displacement, safety, adverse reactions and compliance were compared between the two groups. Results There were no statistically significant differences in gender, age, etc. between the two groups (all P>0.05). The improvement of the incisor angle difference, tooth crown distance difference and molar displacement difference in the observation group were significantly better than those in the control group, the differences were statistically significant (t=11.328, 20.011, 17.336, all P<0.05). The incidence of adverse reactions such as soft tissue edema, oral inflammation and discomfort of correction in the observation group (8%) was lower than that in the control group (28%), the difference was statistically significant (χ²=10.225, P<0.05). The compliance of patients in the observation group (96%) was significantly higher than that in the control group (80%), the difference was statistically significant (χ²=19.316, P<0.05). Conclusion The micro-implant anchorage is effective in the clinical treatment of adolescent orthodontics, with high safety and high patients’ compliance. It is worthy of clinical promotion.

【Key words】Micro-implant monoclonal antibody; Orthodontics; Adolescent; Oral function; Adverse reaction; Curative effect; Safety; Compliance
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【摘要】目的 分析原发性甲状腺功能亢进症(简称甲亢)合并甲状腺微小癌的临床特征,指导临床诊疗。方法 回顾性分析湖北医药学院附属人民医院2013年1月至2019年3月行手术治疗的甲亢合并甲状腺微小癌患者42例(研究组)和无合并甲亢的甲状腺微小癌患者410例(对照组)的临床资料,比较两组流行病学特征、临床分期、B超特点、甲状腺功能与抗体、病理资料和预后。结果 研究组、对照组中B超发现微小钙化的比例分别为61.9%(26/42)、33.4%(137/410)(χ²=13.411,P<0.05),发现多灶结节的比例分别为47.62%(20/42)、69.02%(283/410)(χ²=7.899,P<0.05);研究组、对照组中冰冻检查甲状腺微小癌诊断率分别为61.9%(26/42)、66.1%(271/410)(χ²=4.460,P<0.05),淋巴结转移率分别为9.5%(4/42)、26.8%(110/410)(χ²=6.049,P<0.05)。该组病例中位随访时间37个月,研究组术后均无甲状腺癌复发,有2例术后甲亢复发,对照组3例甲状腺微小癌复发,均二次手术切除。两组随访均无死亡病例。结论 甲亢合并结节时应警惕甲状腺癌的发生,但甲亢合并微小癌预后较好,术式倾向于双侧叶全切除术,可以预防甲亢复发,术中可能无需预防性Ⅵ区淋巴结清扫,以降低甲状腺旁腺和喉返神经损伤的概率。

【关键词】甲状腺功能亢进症;甲状腺肿瘤; 流行病学; 超声检查; 病理学; 临床; 钙化合物;肿瘤分期; 淋巴转移; 预后


Clinical analysis of 42 primary hyperthyroidism patients complicated with thyroid microcarcinoma
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【Abstract】Objective To analyze the clinical data of primary hyperthyroidism patients complicated with thyroid microcarcinoma, and to guide clinical diagnosis and treatment. Methods From January 2013 to March 2019, the clinical data of 42 cases of hyperthyroidism with thyroid microcarcinoma (study group) and 410 cases of thyroid microcarcinoma without hyperthyroidism (control group) who underwent surgical treatment in the People’s Hospital Affiliated to Hubei University of Medicine were retrospectively analyzed. The epidemiological characteristics, clinical diagnosis and treatment, clinical stage, B-ultrasound characteristics, thyroid function and antibody, pathological data and prognosis of the two groups were compared. Results In study group and control group, the proportion of micocalification detected by B-ultrasoundography was 61.9%(26/42) and 33.4%(137/410), respectively, the difference was statistically significant between the two groups(χ²=13.411,P<0.05). In study group and control group, 47.62%(20/42) and 69.02%(283/410) of multifocal nodules were detected by B-ultrasound, the difference was statistically significant between the two groups(χ²=7.899,P<0.05). The diagnostic rates of intraoperative frozen section examination of the study group and the control group were 61.9%(26/42) and 66.1%(271/410), respectively, the difference was statistically significant between the two groups(χ²=4.460,P<0.05). The lymph node metastasis rates of the study group and the control group were 9.5%(4/42) and 26.8%(110/410), respectively, the difference was statistically significant between the two groups(χ²=6.049,P<0.05). The middle follow-up period was 37 months (1 month to 74 months). There was no recurrence of thyroid cancer in the study group, 2 cases with recurrence of hyperthyroidism after operation, and 3 cases with recurrence in the control group, with secondary surgical resection. There were no deaths in the two groups during follow-up. Conclusion Thyroid cancer should be paid attention to
when hyperthyroidism combined with nodules, but the prognosis of hyperthyroidism with microcarcinoma is better. The operation method tends to be bilateral lobectomy, which can prevent the recurrence of hyperthyroidism. In order to reduce the chance of parathyroid gland and recurrent laryngeal nerve injury, there may be no need of preventive lymph node dissection in area VI.

【Key words】Hyperthyroidism; Thyroid neoplasms; Epidemiology; Ultrasonography; Pathology, clinical; Calcium compounds; Neoplasm staging; Lymphatic metastasis; Prognosis

脊髓损伤患者使用四肢血液循环泵治疗期间发生下肢深静脉血栓形成的相关因素分析

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【摘要】目的探讨脊髓损伤(SCI)患者使用四肢血液循环泵治疗期间发生下肢深静脉血栓(DVT)形成的独立危险因素。方法收集2016年1月至2018年12月绍兴市中心医院脊柱外科收治的胸腰段脊柱骨折伴SCI患者300例，于手术后使用四肢血液循环泵预防DVT,48例发生DVT的患者归为DVT组，其余252例归为非DVT组。收集所有患者的基本信息(性别、年龄、身高、体质量等)、体质指数(BMI)、慢性疾病情况(糖尿病、高血压、冠心病等)、吸烟史、是否合并下肢骨折、SCI分类、手术时间、术中出血量等相关因素，分析上述因素在DVT组与非DVT组之间的差异是否具有统计学意义。将具有统计学意义的变量代入logistic回归分析，找出导致SCI患者使用四肢血液循环泵治疗期间发生DVT的独立危险因素。结果DVT组高龄(≥60岁)患者的比例(79.17%)高于非DVT组(57.14%)(χ²=8.196,P=0.004)，肥胖(BMI≥25kg/m²)患者的比例(77.08%)高于非DVT组(56.35%)(χ²=7.203,P=0.007)，合并糖尿病患者的比例(68.75%)高于非DVT组(10.71%)(χ²=84.877,P=0.000)，吸烟患者的比例(81.25%)高于非DVT组(49.21%)(χ²=16.685,P=0.000)，合并下肢骨折患者的比例(41.67%)高于非DVT组(7.14%)(χ²=43.443,P=0.000)，完全性损伤患者的比例(45.83%)高于非DVT组(15.08%)(χ²=23.834,P=0.000)。logistic回归分析显示，合并糖尿病、吸烟史、合并下肢骨折为导致SCI患者使用四肢血液循环泵治疗期间发生DVT的独立危险因素(OR=1.138,1.356,1.548,P=0.0030.0070.014)。结论在SCI患者使用四肢血液循环泵期间发生DVT的独立危险因素可能有合并糖尿病、吸烟史和合并下肢骨折。

【关键词】脊髓损伤；胸腰段脊柱骨折；四肢血液循环泵；下肢深静脉血栓；糖尿病；吸烟史；下肢骨折；独立危险因素

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Analysis of related factors in deep venous thrombosis of lower extremity when using limb blood circulation pump in patients with spinal cord injury
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【Abstract】Objective To investigate the independent risk factors of deep venous thrombosis (DVT) in patients with spinal cord injury (SCI) treated with limb blood circulation pump. Methods From January 2016 to December 2018, 300 patients of thoracolumbar spine fractures with SCI were collected in the department of spinal surgery of Shaoxing Central Hospital. The patients received blood circulation pump to prevent DVT after operation, 48 patients with DVT were classified as DVT group, and the remaining 252 patients were classified as non-DVT group. The basic information (sex, age, height, weight, etc.), body mass index (BMI), chronic disease status (diabetes, hypertension, coronary heart disease, etc.), smoking history, combined lower extremity fracture, SCI classification, operation time, intraoperative blood loss were collected. The differences of above indicators between the DVT group and the non-DVT group were analyzed. The factors with statistical differences were substituted into logistic regression analysis to identify independent risk factors for DVT in patients with SCI who were treated with blood circulation pump. Results The proportion of elderly patients (≥60 years old) in the DVT group was higher than that in the non-DVT group (79.17% vs. 57.14%, χ² = 8.196, P = 0.004), and the proportion of obese patients (BMI ≥ 25kg/m²) in the DVT group was higher than that in the non-DVT group (77.08% vs. 56.35%, χ² = 7.203, P = 0.007), the proportion of patients with diabetes in the DVT group was higher than that in the non-DVT group (10.71% vs. 49.21%, χ² = 84.877, P = 0.000), the proportion of smokers in the DVT group was higher than that in the non-DVT group (41.67% vs. 7.14%, χ² = 43.443, P = 0.000), the proportion of patients with combined fractures in the DVT group was higher than that in the non-DVT group (45.83% vs. 15.08%, χ² = 23.834, P = 0.000). Logistic regression analysis showed that diabetes, smoking history, and combined fractures were independent risk factors for SCI patients who used limb blood circulation pump during treatment of DVT. Conclusion The independent risk factors for DVT in SCI patients using limb blood circulation pump may be diabetes, smoking history, and combined fractures.
the proportion of smokers in the DVT group was higher than that in the non-DVT group (81.25% vs. 49.21%, χ² = 16.685, P = 0.000), the proportion of patients with lower extremity fractures in the DVT group was higher than that in the non-DVT group (41.67% vs. 7.14%, χ² = 43.443, P = 0.000), and the proportion of patients with complete injury in the DVT group was higher than that in the non-DVT group (45.83% vs. 15.08%, χ² = 23.834, P = 0.000). Logistic regression analysis showed that diabetes, smoking history and lower extremity fractures were independent risk factors for DVT in SCI patients with limb blood circulation pump (Or = 1.138, 1.356, 1.548, P = 0.003, 0.007, 0.014).

Conclusion
The independent risk factors for DVT in SCI patients when using blood circulation pump may include diabetes, smoking history and lower extremity fractures.

**Key words** Spinal cord injury; Thoracolumbar spine fracture; Limb blood circulation pump; Lower extremity deep vein thrombosis; Diabetes mellitus; Smoking history; Lower limb fracture; Independent risk factor

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支架辅助与非支架辅助弹簧圈栓塞术治疗急性期破裂宽颈前交通动脉瘤疗效比较

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【摘要】目的 比较支架辅助与非支架辅助弹簧圈栓塞术治疗急性期破裂宽颈前交通动脉瘤的安全性和有效性。方法 收集德州市人民医院神经外科2014年1月至2018年12月接受介入栓塞治疗的破裂宽颈前交通动脉瘤患者76例的临床资料，依据术中是否支架辅助分为支架组41例，非支架组35例。结果支架组根据患者载瘤动脉直径选择相应尺寸的Solitaire AB支架或LVIS支架，非支架组使用单导管，双导管或球囊辅助。两组围手术期并发症发生率，病死率和临床预后差异均无统计学意义。结论支架辅助与非支架辅助弹簧圈栓塞术治疗急性期破裂宽颈前交通动脉瘤均能获得良好的临床效果，使用支架辅助栓塞治疗缺血并发症发生率较高，临床应用需要谨慎。

【关键词】前交通动脉瘤；蛛网膜下腔出血；栓塞；治疗性；组织支架；手术后并发症；预后

【Abstract】Objective To compare the safety and efficacy of stent − assisted and non − stent − assisted coil embolization in the treatment of ruptured wide − necked anterior communicating artery aneurysm in acute stage

Comparison of stent − assisted and non − stent − assisted coils in the treatment of ruptured wide − necked anterior communicating artery aneurysm in acute stage

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【Abstract】Objective To compare the safety and efficacy of stent − assisted and non − stent − assisted coil embolization in the treatment of anterior communicating ruptured wide − necked aneurysms in acute phase.

Methods The clinical data of 76 patients with anterior traffic rupture wide − necked aneurysm treated by interventional embolism from January 2014 to December 2018 were collected in the People’s Hospital of Dezhou. According to whether or not stents were assisted during the operation, 76 cases were divided into stent group (41 cases) and non − stent group (35 cases). The stent group selected the Solitaire AB neurovascular remodoring device or the LVIS support for the corresponding size according to the diameter of the patients’ artery, and the non − stent group used a single catheter, a double catheter, or a balloon assist. The perioperative complications, mortality and clinical prognosis between the two groups were compared.

Results There were no statistically significant differences in bleeding complications, symptomatic vasospasm, mortality and clinical prognosis between the two groups (all P > 0.05). The incidence of ischemic complications in the stent group was 17.07% (7/41), which was significantly higher than that in the non − stent group[2.86% (1/35)] (x² = 4.052, P < 0.05). The overall complication rate of the stent group was 21.95% (9/41), which was significantly higher than 5.71% (2/35) of the non − stent group (x² = 4.021, P < 0.05).

Conclusion Both stent − assisted and non − stent − assisted coils can achieve good clinical results in the treatment of anterior communicating ruptured wide − necked aneurysms in acute phase. Stent − assisted embolism has a high incidence of ischemic complications and needs caution in clinical application.

【Key words】Intracranial aneurysm; Subarachnoid hemorrhage; Embolization, therapeutic; Tissue scaffolds; Postoperative complications; Prognosis

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论著

经软通道微创治疗高血压脑出血的疗效观察及对血清白细胞介素 18、血管内皮生长因子、C 反应蛋白和肿瘤坏死因子 α 影响

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【摘要】 目的 探讨经软通道微创治疗高血压脑出血的疗效及对患者血清白细胞介素 18 (IL-18)、血管内皮生长因子 (VEGF)、C 反应蛋白 (CRP) 和肿瘤坏死因子 α (TNF-α) 的影响。方法 选择台州市中医院 2017 年 4 月至 2019 年 4 月收治的高血压脑出血患者 82 例，依据随机数字表法分为观察组 41 例与对照组 41 例。对照组采用经硬通道微创治疗，观察组采用经软通道微创治疗。比较两组治疗疗效，术前和术后 7 d 颅内血肿变化，术前和术后 7 d 血清 IL-18、VEGF、CRP 和 TNF-α 水平变化，术前和术后 3 个月神经功能减损程度 (NIHSS) 评分变化，及术后并发症。结果 观察组总有效率 (92.68%) 高于对照组 (70.73%) (χ² = 6.609, P < 0.05)，观察组术后 7 d 颅内血肿量 (4.03 ± 1.10) mL，低于对照组的 (7.17 ± 3.61) mL (t = 11.495, P < 0.05)；观察组术后 7 d 血清 IL-18 (123.74 ± 10.27) ng/L，VEGF (113.28 ± 12.10) ng/L，CRP (17.83 ± 3.20) mg/L，TNF-α (0.65 ± 0.12) mg/L，均低于对照组的 (150.38 ± 13.21) ng/L，(141.63 ± 16.87) ng/L，(29.96 ± 4.53) mg/L，(1.09 ± 0.17) ng/L (t = 11.638，9.101，3.831，5.569，均 P < 0.05)；观察组术后 3 个月 NIHSS 评分 (16.53 ± 3.19) 分，低于对照组的 (23.43 ± 4.65) 分 (t = 7.824，P < 0.05)；观察组并发症发生率 (12.20%) 低于对照组 (34.15%) (χ² = 5.549, P < 0.05)。结论 经软通道微创治疗高血压脑出血患者疗效良好，可降低血清 IL-18、VEGF、CRP 和 TNF-α 水平。

【关键词】 颅内出血，高血压性；外科手术，微创性；软通道微创；硬通道微创；白细胞介素 18；血管内皮生长因子；C 反应蛋白；肿瘤坏死因子 α

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Observation of curative effect of soft channel minimally invasive treatment for hypertensive intracerebral hemorrhage and its influence on serum IL-18, VEGF, CRP and TNF-α in patients with hypertensive intracerebral hemorrhage
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【Abstract】Objective To investigate the effect of soft channel minimally invasive treatment on hypertensive intracerebral hemorrhage (HICH) and its influence on serum interleukin-18 (IL-18), vascular endothelial growth factor (VEGF), C-reactive protein (CRP) and tumor necrosis factor-α (TNF-α). Methods From April 2017 to April 2019, 82 patients with HICH admitted to Taizhou Hospital of Traditional Chinese Medicine were randomly divided into observation group (41 cases) and control group (41 cases) according to random number table method. The control group was treated with hard channel minimally invasive treatment, while the observation group was treated with soft channel minimally invasive treatment. The therapeutic effect, intracranial hematoma volume, serum levels of IL-18, VEGF, CRP and TNF-α before and after operation, neurological deficit degree (NIHSS) scores before and after operation, and complications after operation were compared between the two groups. Results The total effective rate of the observation group (92.68%) was higher than that of the control group (70.73%) (χ² = 6.609, P < 0.05). The amount of intracranial hematoma in the observation group [(4.03 ± 1.10) mL] was lower than that in the control group [(7.17 ± 3.61) mL] (t = 11.495, P < 0.05). At 7 d after operation, the serum levels of IL-18 [(123.74 ± 10.27) ng/L], VEGF [(113.28 ± 12.10) ng/L], CRP [(17.83 ± 3.20) mg/L] and
TNF-α ([0.65 ± 0.12] ng/L) in the observation group were lower than those in the control group ([150.38 ± 13.21] ng/L, [141.63 ± 16.87] ng/L, [29.96 ± 4.53] mg/L and [1.09 ± 0.17] ng/L) (t = 11.638, 9.101, 13.831, 5.569, all P < 0.05). The NIHSS score of the observation group ([16.53 ± 3.19] points) was lower than that of the control group ([23.43 ± 4.65] points) at 3 months after operation (t = 7.824, P < 0.05). The incidence of complications in the observation group (12.20%) was lower than that in the control group (34.15%) (χ² = 5.549, P < 0.05).

**Conclusion** Soft channel minimally invasive treatment for HICH has good effect and can reduce the changes of serum levels of IL-18, VEGF, CRP and TNF-α.

【Key words】 Intracranial hemorrhage, hypertensive; Surgical procedures, minimally invasive; Soft channel minimally invasive; Hard channel minimally invasive; Interleukin-18; Vascular endothelial growth factor; C-reactive protein; Tumor necrosis factor - α

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亚甲基二磷酸盐联合氯化锶治疗多发性骨转移癌骨痛的效果观察

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【摘要】目的 探讨亚甲基二磷酸盐(99TC-MDP,云克)联合氯化锶(89SrCl2)治疗多发性骨转移癌骨痛的临床疗效。方法 回顾性分析大同煤集团总医院2014年8月至2019年7月收治的多发性骨转移癌骨痛患者95例的临床资料，依据治疗方法不同分为三组，云克组37例采用单独云克治疗，89SrCl2组29例采用单独89SrCl2治疗，联合组29例采用云克联合89SrCl2治疗。三组均治疗5d，每月为1疗程。比较三组临床疗效、止痛时间及不良反应。结果 治疗后，云克组、89SrCl2组、联合组患者疼痛缓解率分别为67.6%(25/37)、69.0%(20/29)、79.3%(23/29)，联合组疼痛缓解率高于云克组(χ2=4.25，P<0.05)。联合组骨转移灶有效率为41.4%(12/29)，高于云克组的0.0%(0/37)、89SrCl2组的17.2%(5/29)，差异均有统计学意义(χ2=13.09,10.54，均P<0.01)。三组均未发现严重不良反应。结论 云克联合89SrCl2治疗骨转移癌，明显优于单独89SrCl2及单独云克治疗，且安全。

【关键词】肿瘤转移；骨转移癌；骨痛；亚甲基二磷酸盐；氯化锶；对比研究


Effect of methylene diphosphate combined with strontium chloride in the treatment of bone pain caused by multiple bone metastases
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【Abstract】Objective To investigate the clinical efficacy of Yunke(99TC-MDP) combined with strontium 89SrCl2 in the treatment of bone pain in patients with multiple bone metastases. Methods The clinical data of 95 patients with multiple bone metastases admitted to the General Hospital of Datong Coal Group from August 2014 to July 2019 were retrospectively analyzed. According to the different treatment methods, they were divided into three groups: 37 patients in the Yunke group were treated with Yunke alone, 29 patients in the 89SrCl2 group were treated with 89SrCl2 alone, 29 patients in the combination group were treated with Yunke combined with 89SrCl2. All patients were treated for 5 days, with a course of treatment per month. The clinical efficacy, analgesic time and adverse reactions of the three groups were compared. Results After treatment, the pain relief rates of the Yunke group, the 89SrCl2 group and the combination group were 67.6% (25/37), 69.0% (20/29) and 79.3% (23/29), respectively. The pain relief rate of the combined group was higher than that of the Yunke group (χ2 = 4.25, P < 0.05). The effective rate of bone metastases in the combined group was 41.4% (12/29), which was higher than that in the Yunke group [0.0% (0/37)] and the 89SrCl2 group [17.2% (5/29)], the differences were statistically significant (χ2 = 13.09, 10.54, all P < 0.01). No serious adverse reactions were found in the three groups. Conclusion Yunke combined with 89SrCl2 is superior to 89SrCl2 alone, and it is safe in the treatment of bone metastases.

【Key words】Neoplasm metastasis; Metastatic carcinoma of bone; Bone pain; Methylene diphosphate; Strontium chloride; Comparative study

【摘要】 目的 探讨大骨瓣开颅术治疗急性颅脑创伤的效果及对患者应激反应的影响。方法 选择建德市第一人民医院 2015 年 1月至 2018 年 12 月收治的急性颅脑创伤患者 80 例，采用随机数字表法分为对照组 40 例与观察组 40 例。对照组患者采用常规开颅减压术，观察组患者采用大骨瓣开颅术。比较两组治疗前与治疗后 2 周颅内压，格拉斯哥昏迷指数（GCS 评分）、应激反应指标变化，治疗后 6 个月预后情况，分析并发症发生情况。结果 观察组治疗后 2 周颅内压（8.48 ± 2.10）mmHg，低于对照组的（11.86 ± 1.74）mmHg，而 GCS 评分（10.35 ± 1.87）分，高于对照组的（7.69 ± 1.15）分（t = 19.434，7.663，均 P < 0.05）；观察组治疗后 2 周血清促肾上腺皮质激素（ACTH）（35.19 ± 5.46）μg/L，皮质醇（Cor）（17.41 ± 4.56）μg/L，均低于对照组的（48.91 ± 4.95）μg/L，（28.93 ± 7.48）μg/L（t = 11.774，8.317，均 P < 0.05）；观察组治疗后 6 个月预后良好（60.00%）优于对照组（32.50%），差异有统计学意义（χ² = 6.084，P < 0.05）；观察组并发症发生率（5.00%）低于对照组（22.50%），差异有统计学意义（χ² = 5.165，P < 0.05）。结论 大骨瓣开颅术治疗急性颅脑创伤患者效果良好，且可减轻应激反应，并发症少，值得临床借鉴。

【关键词】 颅骨切开术；减压术，外科；颅脑损伤；格拉斯哥昏迷指数；应激反应

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Observation on the effect of craniotomy with large bone flaps on acute cranio-cerebral trauma and its influence on stress response of patients

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【Abstract】 Objective To investigate the effect of large bone flap craniotomy on acute cranio-cerebral trauma and its influence on stress response. Methods From January 2015 to December 2018, 80 patients with acute cranio-cerebral trauma were randomly divided into control group (40 cases) and observation group (40 cases) by random number table method. The patients in the control group were treated with conventional craniotomy and decompression, while the patients in the observation group were treated with craniotomy with large bone flaps. The changes of intracranial pressure, Glasgow coma index (GCS score), stress response index, prognosis and complications after 6 months were compared between the two groups before treatment and 2 weeks after treatment. Results Two weeks after treatment, the intracranial pressure in the observation group [(8.48 ± 2.10) mmHg] was lower than that in the control group [(11.86 ± 1.74) mmHg], while the GCS score[(10.35 ± 1.87) points] was higher than that in the control group [(7.69 ± 1.15) points] (t = 19.434, 7.663, all P < 0.05). Two weeks after treatment, the serum levels of ACTH [(35.19 ± 5.46) μg/L] and cortisol [(17.41 ± 4.56) μg/L] in the observation group were lower than those in the control group [(48.91 ± 4.95) μg/L and (28.93 ± 7.48) μg/L] (t = 11.774, 8.317, all P < 0.05). Six months after treatment, the prognosis of the observation group (60.00%) was better than that of the control group (32.50%) (χ² = 6.084, P < 0.05). The incidence of complications of the observation group (5.00%) was lower than that of the control group (22.50%) (χ² = 5.165, P < 0.05). Conclusion Craniotomy with large bone flaps has good effect in the treatment of patients with acute cranio-cerebral trauma, and can reduce stress response and with fewer complications, which is worthy of clinical reference.

【Key words】 Craniotomy; Decompression, surgical; Cranio-cerebral trauma; Intracranial pressure; Glasgow coma index; Stress response

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新型口服抗凝药用于高龄非瓣膜性心房颤动患者抗凝治疗的有效性及安全性分析

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【摘要】目的 探讨新型口服抗凝药治疗高龄非瓣膜性心房颤动患者抗凝治疗有效性及安全性。方法 选择2016年3月至2018年9月浙江绿城心血管病医院收治的高龄非瓣膜性心房颤动患者176例，根据患者治疗情况将其分为华法林组56例、达比加群酯组64例、利伐沙班组56例。三组患者均连续治疗6个月，比较三组患者栓塞事件及出血事件发生率、治疗前后血脂以及肝肾功能指标变化情况。结果 华法林组、达比加群酯组、利伐沙班组血栓栓塞事件发生率分别为7.14%（4/56）、1.56%（1/64）、3.57%（2/56），差异无统计学意义（U=2.457，P>0.05）。华法林组、达比加群酯组、利伐沙班组出血发生率分别为16.07%（9/56）、3.13%（2/64）、1.79%（1/56），差异有统计学意义（U=11.090，P<0.05），其中华法林组患者出血发生率显著高于达比加群酯组及利伐沙班组（χ²=6.012，7.028，均P<0.05）。三组患者治疗前后血糖、血脂以及肝肾功能指标差异均无统计学意义（均P>0.05）。结论 新型口服抗凝药物达比加群酯以及利伐沙班与华法林相比较，在预防高龄非瓣膜性心房颤动患者脑卒中及血栓栓塞方面具有相似的效果，而达比加群酯及利伐沙班服用期间发生出血事件的风险更低，提示新型口服抗凝药物治疗具有着较高的有效性和安全性，值得临床推广。

【关键词】心房颤动；抗凝药；华法林；达比加群酯；利伐沙班；安全；老年人
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Analysis of efficacy and safety of new oral anticoagulants in the treatment of elderly patients with non-valvular atrial fibrillation
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【Abstract】Objective To investigate the efficacy and safety of new oral anticoagulants in the treatment of elderly patients with non-valvular atrial fibrillation. Methods From March 2016 to September 2018, 176 elderly patients with non-valvular atrial fibrillation admitted to Lyucheng Cardiovascular Hospital of Zhejiang Province were selected and divided into warfarin group (56 cases), dabigatran group (64 cases) and rivaroxaban group (56 cases) according to the treatment conditions. All three groups were treated for 6 months. The incidence of embolism and bleeding events, the changes of blood sugar and liver, kidney function before and after treatment in three groups were compared. Results The incidence rates of thromboembolism in the warfarin group, dabigatran group and rivaroxaban group were 7.14% (4/56), 1.56% (1/64), 3.57% (2/56), respectively, there was no statistically significant difference among the three groups (U=2.457, P>0.05). The incidences of bleeding in the warfarin group, dabigatran group and rivaroxaban group were 16.07% (9/56), 3.13% (2/64), 1.79% (1/56), respectively, there was statistically significant difference among the three groups (U=11.090, P<0.05), which in the warfarin group was significantly higher than that in the dabigatrate group and rivaroxaban group (χ²=6.012, 7.028, all P<0.05). There were no statistically significant differences in blood sugar, lipid, liver and kidney function among the three groups before and after treatment (all P>0.05). Conclusion Compared with warfarin, the new oral anticoagulant dabigatran ester and rivaroxaban have similar effects in preventing stroke and thromboembolism in elderly patients with non-valvular atrial fibrillation, while the risk of bleeding events during the administration of dabigatran ester and rivaroxaban is lower, suggesting that the new oral anticoagulant is effective in the treatment of stroke and thromboembolism in elderly patients with non-valvular atrial fibrillation. The therapy has high efficacy and safety, which is worthy of clinical promotion.

【Key words】Atrial fibrillation; Anticoagulants; Warfarin; Dabigatran; Rivaroxaban; Safety; Aged
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依达拉奉联合丁苯酞软胶囊治疗早期急性脑梗死的疗效
及对神经元特异性烯醇化酶、S-100β蛋白和超氧化物歧化酶水平的影响

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【摘要】目的　探讨依达拉奉联合丁苯酞软胶囊治疗早期急性脑梗死(ACI)的疗效,分析该方法对血清神经元特异性烯醇化酶(NSE)、S-100β蛋白和超氧化物歧化酶(SOD)水平的影响。方法　选择2017年2月至2018年12月临猗县人民医院神经内科诊疗的急性脑梗死患者96例,按照入院单号随机标记法分为观察组和对照组各48例,对照组单独使用依达拉奉进行治疗,观察组患者在对照组的基础上联合丁苯酞软胶囊进行治疗;观察并分析治疗前后的NSE、S-100β、SOD水平变化以及美国国立卫生研究院卒中量表(NIHSS)的评分变化。结果　治疗前两组NSE、S-100β及SOD水平差异无统计学意义(均P>0.05);治疗后观察组血清NSE(6.29±1.72)μg/L、S-100β(3.73±1.56)μg/L,均低于治疗前,且均低于对照组(t=3.769,3.317,均P<0.001);治疗后观察组SOD(42.38±7.32)μg/L,明显高于对照组(t=3.533,P<0.05);观察组总有效治疗率为97.92%,高于对照组的75.00%(χ²=10.766,P<0.001)。结论　使用依达拉奉联合丁苯酞软胶囊进行对ACI进行治疗,可有效提高ACI的临床治疗效果,进一步保证早期急性脑梗死患者的术后恢复,值得在相关疾病诊治中推广。

【关键词】依达拉奉;丁苯酞软胶囊;早期急性脑梗死;神经元特异性烯醇化酶;超氧化物歧化酶;S-100β蛋白
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Effect of edarabone combined with butyphenphthalein soft capsule in the treatment of patients with early acute cerebral infarction and its influence on neuron – specific enolase, S–100β protein and SOD levels

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河南省平顶山市美沙酮维持治疗人群特征与治疗情况分析

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【摘要】目的 了解平顶山市参加美沙酮维持治疗(MMT)人群的基本特征、治疗依从性以及脱失原因，为提高门诊治疗效率提供依据。方法 统计平顶山市疾病预防控制中心药物维持治疗中心 2017 年 12 月以来首次入组的阿片类物质成瘾者信息，对其进行人口学特征、既往毒品使用情况和 MMT 治疗情况进行描述性分析，并用回归模型分析维持率的影响因素。结果 首次入组 MMT 的鸦片或海洛因成瘾者共 141 例。男女比例为 3.86:1；年龄 (43.96 ± 8.05) 岁；未婚、离异或丧偶 82 例，占 58.16%；初中及以下文化程度 94 例，占 66.67%；初次吸毒年龄为 (25.06 ± 6.34) 岁；吸毒时间 (9.07 ± 6.48) 年，最短 5 个月，最长 27 年；单纯使用阿片类者 134 例，占 95.04%；曾有毒品注射行为者 26 例，占 18.44%。治疗期间平均服药剂量为 (69.54 ± 25.07) mL。MMT 维持率为 40.43% (57/141)。MMT 维持率在文化程度高、居住地离门诊近、交通方便、吸毒时间长、日均服药剂量大的患者中较高。结论 平顶山市 MMT 患者以男性、非在婚状态者、初中及以下文化程度者为主，与其他地区一致。提高维持率需增设服务延伸点，应关注低文化、吸毒时间短、服药剂量小的人群。

【关键词】美沙酮；阿片类物质；成瘾；维持治疗；人群特征；影响因素；维持率；脱失
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Characteristics and treatment of methadone maintenance therapy in Pingdingshan city, Henan province

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Effect of PVA artery embolization through coaxial microcatheter in the treatment of massive hemoptysis

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胸腺法新联合化疗治疗非小细胞肺癌的效果观察

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【摘要】 目的 观察胸腺法新联合化疗治疗非小细胞肺癌的临床效果及其对患者免疫功能的影响。方法 选取新野县人民医院2017年1月至2019年1月收治的非小细胞肺癌患者58例,采用随机数字表法分成两组,每组29例。对照组采用紫杉醇、卡铂方案化疗,观察组采用紫杉醇、卡铂方案化疗联合胸腺法新治疗。观察两组临床疗效及免疫功能(CD4+、CD8+、CD4+/CD8+)的变化。结果 观察组总有效率为93.1%(27/29),高于对照组的65.5%(19/29),差异有统计学意义(χ²=5.874, P<0.05)。治疗后,观察组CD4+、CD8+、CD4+/CD8+分别为(52.3±1.6)%,(20.5±1.0)%,(2.6±0.5),均高于对照组的(44.6±1.7)%,(17.6±1.1)%,(2.3±0.4),差异均有统计学意义(t=17.813,10.506,4.515,均P<0.05)。结论 胸腺法新联合紫杉醇、卡铂方案化疗可显著提高非小细胞肺癌患者的治疗效果,改善患者的免疫功能。

【关键词】 肺癌; 非小细胞肺; 胸腺法新; 抗肿瘤联合化疗方案; 紫杉醇; 卡铂; 免疫功能
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Observation on the effect of thymus neoadjuvant chemotherapy for non−small cell lung cancer

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专科特色健康教育和情志护理对急性心肌梗死患者
疾病认知程度及满意度的影响

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【摘要】目的 研究专科特色健康教育和情志护理对急性心肌梗死患者疾病认知程度以及满意度的影响。方法 选取 2017 年 10 月至 2019 年 3 月杭州市西溪医院心血管内科收治的急性心肌梗死患者 50 例为研究对象，采用随机数字表法分两组，每组 25 例。对照组应用常规护理，给予合理的休息和膳食，心理调整和药物治疗，观察组在对照组的基础上实施专科特色健康教育结合情志护理。比较两组患者对疾病的知晓率、护理满意度。结果 观察组急性心肌梗死患者的疾病知晓率为 92.00% ，高于对照组的 68.00% (χ² = 4.500, P = 0.033)；观察组患者的护理满意度为 96.00% ，高于对照组的 76.00% (χ² = 4.152, P = 0.041)。结论 在急性心肌梗死患者护理过程中应用专科特色健康教育和情志护理，可以明显提高患者对疾病认知程度以及满意度，值得应用。

【关键词】心肌梗死；健康教育；护理；情志疗法；认知；病人满意度
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Analysis of the influence of special health education and emotional nursing on the cognition and satisfaction of patients with acute myocardial infarction

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产科病区实施贵宾式护理的效果观察

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【摘要】 目的 分析产科病房开展贵宾式(VIP)护理模式对产妇分娩的影响和临床应用价值。方法 选取义乌中心医院2017年1月至2018年12月住院分娩的产妇250例，根据护理方法不同分为对照组125例和观察组125例。对照组采取常规产科护理，观察组采取VIP产科护理模式，分析两组患者护理效果。结果 观察组第一产程时间(321.13±28.91)min，第二产程时间(23.25±8.66)min，第三产程时间(6.12±1.02)min，总产程时间(259.18±36.03)min，均短于对照组，差异均有统计学意义(t=11.308, 13.874, 12.194, 15.879，均P<0.05)。观察组产后出血量(171.43±19.06)mL，疼痛评分(1.78±1.01)分，住院时间(4.02±1.12)d，护理满意度评分(95.13±3.76)分，剖宫产率12.80%，与对照组比较差异均有统计学意义(t=14.438, 12.398, 14.392, 15.093, χ²=4.013，均P<0.05)。观察组发生产褥感染2例，宫颈裂伤1例，产后尿潴留4例，新生儿窒息0例；对照组发生产褥感染11例，宫颈裂伤13例，产后尿潴留16例，新生儿窒息6例，两组差异均有统计学意义(χ²=3.478, 3.917, 4.018, 4.881，均P<0.05)。结论 产科病房开展VIP护理模式可以缩短产程和住院时间，减少产后出血量和围生期并发症，降低剖宫产率。

【关键词】 医院，产科；产妇卫生保健服务；产科护理；护理实践模式；分娩过程；时间因素；产后出血；分娩并发症


Effect of implementation of VIP in obstetric ward on the quality of nursing management

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重型颅脑损伤术后早期康复知信行相关调查研究

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【摘要】目的 调查护士对重型颅脑损伤患者术后早期康复知识、态度、行为现状，为改善重型颅脑损伤术后早期康复护理工作提供参考。方法采用便利抽样的方法，选取嵊州市人民医院2019年1-4月神经外科护士150名进行早期康复知识、态度、行为问卷调查，调查问卷为自行设计，包括《一般情况调查表》和《神经外科护士对重型颅脑损伤术后早期康复知信行调查问卷》。结果神经外科护士重型颅脑损伤术后早期康复知识得分为（81.65±17.83）分，术后早期康复态度得分为（42.50±7.83）分，术后早期康复行为得分为（74.86±14.39）分；知识得分与态度得分呈正相关（r=0.396, P=0.003），知识得分与行为得分呈正相关（r=0.231, P=0.002），态度得分与行为得分呈正相关（r=0.480, P=0.005）。结论神经外科护士对重型颅脑损伤术后早期康复护理的知识、态度以及行为水平均位于中等偏上，管理者应加强对护士早期康复护理相关理论知识及临床康复技能的培训，有效转变其负性态度，促进其正性行为，进一步提高其重型颅脑损伤术后康复护理质量。

【关键词】颅脑损伤；神经外科手术；手术后医护；康复护理；知识；行为；态度；问卷调查；护士

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Research progress on mycoplasma pneumoniae infection and high-density lipoprotein metabolism

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【Abstract】Mycoplasma pneumoniae is a Gram-negative bacterium without cell wall, which mainly invades the respiratory tract and also can cause multi-system damage. Studies have shown that high-density lipoprotein can bind and neutralize lipopolysaccharide in the cell wall of Gram-negative bacteria and phosphoric acid in the cell wall of Gram-positive bacteria, inhibiting inflammation and protecting the body during pathogen infection. Because mycoplasma pneumoniae lacks cell walls, there were almost no studies about high density lipoprotein metabolism changes during mycoplasma pneumoniae infection. This paper will review the research progress of mycoplasma pneumoniae infection and high-density lipoprotein metabolism.

【Key words】Mycoplasma pneumoniae; Bacteria; Infection; Cell wall; Teichoic acids; Lipoproteins; HDL; Lipopolysaccharides; Review

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