心血管疾病

冠心病患者血清白细胞介素 17A、血管内皮生长因子、25-羟维生素 D3 水平变化及其与冠状动脉狭窄程度的相关性分析 …………………… 1793

丁玲芳 赵文芳 张蕾 刘艳 李秀征

不同他汀类药物对冠心病患者脂代谢、动脉粥样硬化及血管内皮功能的影响 ……………………………………………………… 1803

白雪蕾

美托洛尔联合阿托伐他汀钙对原发性高血压患者脂代谢、血管内皮功能和炎性因子的影响 ……………………………………… 1808

厉飞翔 彭继仁 马姣姣

前列腺对经皮冠状动脉介入术后患者心肌保护作用及炎性因子和氧化应激的影响 ………………………………………………… 1813

阮政文

心电图 QRS 波时限延长对老年高血压合并心力衰竭患者心脏不良事件的预测价值 ……………………………………………………… 1818

周蓉 张磊

左旋多巴联合索他洛尔对中风患者血浆血管紧张素 II、C 反应蛋白及氨基端脑钠肽前体水平的影响 ……………………………… 1823

陈婉斐 李珍珍 尚香玉

论著

继发性甲状旁腺功能亢进症术后迟发性出血的原因分析 …………………… 1828

冯剑平 唐学兵 叶剑 谭建辉

经阴道超声检测对高危孕妇发生未足月胎膜早破的预测价值 ……… 1832

陈洪霞 蔡晓霞
枸橼酸钠与低分子肝素用于有高危出血风险的血液透析患者效果比较

中烧蓉

腹腔镜辅助小切口下保胆取石即时缝合术治疗胆囊结石疗效观察

徐杰 孙道中 王鸽

组织多普勒成像 Tei 指数对新生儿窒息后心肌损伤程度、右心功能的评估价值

季坚卫 杨莲芳 戚向英

老年人动脉硬化性肺动脉下腔出血继发癫痫的相关因素分析

张军 李汉永 罗卫东 熊呀 金灿 李旭成

赖氨酸锌联合清热解毒治疗小儿轮状病毒性肠炎的临床观察

纪菲菲

络酸梭菌二联活菌对肺炎合并抗生素相关性腹泻患儿肠道菌群及炎症、免疫指标的影响

雷培瑜 雷婧 姜波

地佐辛镇静用于臂丛神经阻滞的效果观察

沈娟萍 罗艳萍 方敏

米氮平联合度洛西汀治疗抑郁症伴失眠的效果观察

王鹭 张迪 曹峰

中孕期胎儿超声软指标阳性的临床意义分析

张劲元

研究与实践

不同浓度罗哌卡因骶管阻滞对腹股沟斜疝患儿术后疼痛的影响

陈友勇 王树桂 吕露 徐扬

肌电生物反馈配合康复教育治疗脑卒中偏瘫患者的

效果观察及其对活动能力的影响

吴琼洁 胡文初 姜波

Tei 指数评估慢性阻塞性肺疾病患者右心功能并预测脱机拔管的临床研究

沈启 包松雄 胡玉平

理气和胃方加减联合针刺、穴位贴敷治疗消化道肿瘤的效果观察

李京波 胡善杰

医学教育

分层次理念下自制微课教学法在麻醉专业住院医师规培中的效果分析

刁建华 程远 孙建良 罗贤哲 俞婷 金玉华

卫生管理

新形势下临床路径实施的困难及对策

罗瑶
健康教育

健康教育路径结合“317 护”在儿科临床特殊检查中的应用 ................................................................. 1895

杨丽平 何朗朗 徐景霞 章赛春

护理学

戴明环管理对肠造口患者生活质量的影响 ................................................................. 1898

邵芬娣 娄海飞 邢刘芬 梅慧飞

“知信行”模式联合动机式访谈在持续性非卧床腹膜透析患者中的应用及效果 .............................. 1901

王淑颖

体温监测与管理干预策略用于骨科手术患者的效果分析 ................................................................. 1905

周丽敏 周敏 黄志红

广东省广州市花都区人民医院医联体护士对压力性损伤护理知信行的调查 ....................................... 1909

凌晨 陈妹 苏 邓紫桥

安宁照护用于肿瘤临终患者的满意度调查 ................................................................. 1914

於蓓 李剑萍 俞晓利

综 述

急性 ST 段抬高型心肌梗死患者中微循环阻力指数相关性的研究进展 ................................................................. 1917

周健伟 张晶 何胜虎

中国基层医药杂志社打假维权声明 ................................................................................................. 1836

《中国基层医药》杂志 2019 年相关指标一览表 ..................................................................................... 1873

《中国基层医药》杂志 2021 年度重点报道计划 ..................................................................................... 1877

本期广告目次 ........................................................................................................................................... 1908

本刊稿约见本卷第 1 期后插 1、第 13 期后插 1

执行编委 胡世莲 郑笑林 英文审校 黄河胜 责任编辑 曹安来 姜波 责任排版 蒋传坤
冠心病患者血清白细胞介素 17A、血管内皮生长因子、25-羟维生素 D₃ 水平变化及其与冠状动脉狭窄程度的相关性分析

冷文俊

【摘要】 目的 探讨冠心病(CHD)患者血清白细胞介素 17A(IL-17A)、血管内皮生长因子(VEGF)、25-羟维生素 D₃(25(OH)D₃)水平变化及其与冠状动脉狭窄程度的相关性。方法 选取临沂市人民医院2017年6月至2018年6月收治的CHD患者40例为观察组,选取该院同期体检健康者60例为对照组。记录两组一般资料,采用全自动生化检测仪检测受试者生化指标,酶联免疫吸附试验(ELISA)检测受试者血清IL-17A、VEGF、25(OH)D₃水平,采用Gensini积分评价冠状动脉狭窄程度,采用SPASS Pearson软件分析冠心病患者血清IL-17A、VEGF、25(OH)D₃水平与冠状动脉狭窄程度的关系。结果 观察组收缩压、舒张压、糖尿病比例、高血压比例、高脂血症比例、饮酒比例、吸烟史比例及Gensini积分分别为(140.64±17.65) mmHg、(98.31±9.37) mmHg、20例(50.0%)、31例(77.5%)、26例(65.0%)、22例(55.0%)、20例(50.0%)、(56.62±16.48) ng/L、(79.52±10.44) ng/L、17例(28.3%)、34例(56.6%)、27例(45.0%)、21例(35.0%)、18例(30.0%)、(3.10±1.02)分,两组差异均有统计学意义(t=3.629,9.382,χ²=4.833,4.576,3.854,3.917,4.074,均P<0.05)。观察组血脂α、血糖分别为(1.46±0.41) g/L、(5.60±1.17) mmol/L,均显著高于对照组的(1.31±0.27) g/L、(5.20±0.56) mmol/L(t=2.038,2.014,均P<0.05);观察组血清IL-17A、VEGF分别为(43.82±5.18) ng/L、(83.77±17.80) ng/L,均显著高于对照组的(37.28±4.37) ng/L、(56.62±16.48) ng/L(t=6.576,7.695,均P<0.05)、25(OH)D₃为(15.15±8.67) pg/L,显著低于对照组的(37.34±16.20) pg/L(t=8.874,P<0.05)。采用SPASS Pearson软件分析,冠心病患者血清IL-17A、VEGF与Gensini积分呈正相关(r=0.567,0.633,均P<0.05)、25(OH)D₃与Gensini积分呈负相关(r=-0.618,P<0.05)。结论 CHD患者血清IL-17A、VEGF显著升高,其与冠状动脉狭窄程度呈正相关;血清25(OH)D₃水平显著降低,其与冠状动脉狭窄程度呈负相关。

【关键词】 冠状动脉疾病; 白细胞介素类; 血管内皮生长因子; 25-羟维生素 D₃; 冠状动脉狭窄; Gensini冠脉评分; 相关性; 病例对照研究

基金项目: 广东省医学科学技术研究基金项目(A2017242)
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.001

Changes of serum IL-17A, VEGF, 25(OH)D₃ levels in patients with coronary heart disease and their correlation with severity of coronary artery stenosis

Leng Wenjun

Department of Cardiology, the People’s Hospital of Linfen, Linfen, Shanxi 041000, China

【Abstract】 Objective To investigate the changes of serum IL-17A, VEGF, 25(OH)D₃ levels in patients with coronary heart disease (CHD) and their correlation with severity of coronary artery stenosis. Methods From June 2017 to June 2018, 40 CHD patients treated in the People’s Hospital of Linfen were selected as observation group. At the same time, 60 healthy subjects were selected as control group. The general data of the two groups were recorded. The levels of serum IL-17A, VEGF, 25(OH)D₃ were measured by enzyme-linked immunosorbent assay (ELISA), and the degree of coronary stenosis was evaluated by Gensini integral. SPASS Pearson software was used to analyze the relationship between the levels of serum IL-17A, VEGF, 25(OH)D₃ and coronary artery stenosis course in patients with CHD. Results The proportions of systolic blood pressure, diastolic blood pressure, diabetes, hypertension, hyperlipidemia, alcohol consumption, smoking history and Gensini in the observation group were (140.64±17.65) mmHg, (98.31±9.37) mmHg, 20 cases (50.0%), 31 cases (77.5%), 26 cases (55.0%), 22 cases (55.0%), 20 cases (50.0%)，(27.43±3.26) points, respectively, which in the control group were (128.15±
15.60 mmHg, (79.52 ± 10.44) mmHg, 17 cases (28.3%), 34 cases (56.6%), 27 cases (45.0%), 21 cases (35.0%), 18 cases (30.0%), (3.10 ± 1.02) points, respectively, the differences between the two groups were statistically significant (t = 3.629, 9.382, χ² = 4.833, 4.579, 3.854, 4.074, t = 45.730, all P < 0.05). The lipoprotein α, blood glucose in the observation group were (1.46 ± 0.41) g/L and (5.60 ± 1.17) mmol/L, respectively, which were significantly higher than those in the control group [(1.31 ± 0.27) g/L and (5.20 ± 0.56) mmol/L] (t = 2.038, 2.014, all P < 0.05). The serum levels of IL-17A and VEGF in the observation group were (43.82 ± 5.18) ng/L, (83.77 ± 17.80) ng/L, respectively, which were significantly higher than those in the control group [(37.28 ± 4.37) ng/L, (56.62 ± 16.48) ng/L] (t = 6.576, 7.695, all P < 0.05). The 25(OH)D₃ level of the observation group was (15.15 ± 8.67) pg/L, which was significantly lower than that of the control group [(37.34 ± 16.20) pg/L] (t = 8.874, P < 0.05). The results of SPASS Pearson analysis showed that there was positive correlation between the levels of serum IL-17A, VEGF and Gensini score (r = 0.567, 0.633, all P < 0.05), the negative correlation between the level of serum 25(OH)D₃ and Gensini score in patients with CHD (r = −0.618, P < 0.05).

**Conclusion**  The levels of serum IL-17A, VEGF in patients with CHD are significantly higher, which are positively correlated with the degree of coronary artery stenosis. The serum 25(OH)D₃ level decreases significantly, which is negatively correlated with the degree of coronary artery stenosis.

**Key words**  Coronary artery disease; Interleukins; Vascular endothelial growth factor; 25-hydroxyvitamin D₃; Coronary stenosis; Gensini coronary score; Relevance; Case control study

**Fund program:** Medical Science and Technology Research Foundation Project of Guangdong Province (A2017242)

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.001
Correlation between heart rate deceleration, serum homocysteine and coronary artery lesion in coronary heart disease patients with hypertension

Ding Lingyan1, Zhao Xiling2, Zhang Lei3, Liu Yan1, Li Xiuzheng1

1 Special Inspection Section, Binzhou Central Hospital, Binzhou, Shandong 251700, China; 2 Department of Cardiology, Binzhou Central Hospital, Binzhou, Shandong 251700, China; 3 Department of Cardiology, Shengli Oilfield Central Hospital, Dongying, Shandong 257034, China

Objective To explore the correlation between the level of heart rate deceleration (DC), serum homocysteine (Hcy), the scope and extent of coronary artery lesion in coronary heart disease patients with hypertension.

Methods From January 2019 to October 2019, 103 coronary heart disease patients with hypertension who were diagnosed and hospitalized in cardiovascular department of Binzhou Central Hospital were selected as coronary heart disease (CHD) group, and 52 patients with simple hypertension were selected as control group. The serum Hcy levels of the two groups were measured and analyzed. The DC value and the difference of the two groups were analyzed. The degree of coronary artery lesion was evaluated by the number of coronary artery lesion and Gensini score. The relationship between DC, Hcy and the degree of coronary artery lesion was analyzed.

Results Compared with the control group, the DC value of CHD group was significantly lower \([ (6.02 \pm 1.97) \text{ ms} vs. (4.97 \pm 1.59) \text{ ms}, t = -3.989, P < 0.05 ]\), and the serum Hcy level was increased \([ (11.46 \pm 4.38) \mu \text{ mol/L} vs. (16.79 \pm 6.31) \mu \text{ mol/L}, t = 4.260, P < 0.05 ]\). In the CHD group, the DC values and Gensini scores of the patients with single vessel lesion, double vessel lesion, and triple vessel lesion were compared, and the results showed that the DC values and Gensini scores of the patients with triple vessel lesion were significantly lower than those with single vessel lesion and double vessel lesion \([ (F = 13.487, P < 0.05) ]\). The correlation analysis showed that the serum Hcy level was positively correlated with the number of coronary artery lesion and Gensini score \((r = 0.369, P < 0.05)\). The relationship between DC and the number of coronary artery lesion was significantly negative \((r = -0.310, P < 0.05)\). Serum Hcy was positively correlated with Gensini score \((r = 0.369, P < 0.05)\). The degree of coronary artery lesion was positively correlated with the number of coronary artery lesion and Gensini score \((r = 0.485, P < 0.05)\). The degree of coronary artery lesion was also positively correlated with Gensini score \((r = 0.612, P < 0.05)\). The correlation analysis showed that the serum Hcy level was negatively correlated with the degree of coronary artery lesion in CHD group \((r = -0.427, P < 0.05)\).
lesions and three vessel lesions were \((5.52 \pm 1.34)\) ms, \((5.06 \pm 1.29)\) ms, \((4.39 \pm 1.19)\) ms, \((21.35 \pm 17.10)\) points, \((26.93 \pm 18.18)\) points, \((49.39 \pm 30.14)\) points, respectively. The DC value of patients with three vessel lesions was lower than that of patients with single vessel lesion \((F = 7.349, P < 0.05)\), and the Gensini score was higher \((F = 13.487, P < 0.05)\). There were no statistically significant differences in DC value and Gensini score between patients with three vessel lesions and those with two vessel lesions and those with single vessel lesion \((P > 0.05)\). The serum Hcy levels of patients with single, double and three vessel lesions were \((14.67 \pm 5.97)\) μmol/L, \((15.85 \pm 6.29)\) μmol/L and \((16.97 \pm 7.13)\) μmol/L, respectively. The difference among the three groups was statistically significant \((F = 12.427, P < 0.05)\). There was a negative correlation between DC and Gensini score \((r = -0.310, P < 0.05)\), and a positive correlation between serum Hcy and Gensini score \((r = 0.369, P < 0.05)\).

**Conclusion** The DC value and Hcy level in coronary heart disease patients with hypertension are significantly decreased, which are closely related to the degree of coronary artery lesion.

**Key words** Heart rate deceleration force; Serum homocysteine; Coronary artery; Hypertension; Coronary heart disease; Relevance; Serum; Degree of lesion

DOI:10.3760/cma.j.issn.1008-6706.2020.15.002
Effects of different statins on lipid metabolism, atherosclerosis and vascular endothelial function in patients with coronary heart disease

Bai Xuelei
Laboratory of Cardiac Physiology, the Second People’s Hospital of Nanyang, Nanyang, Henan 473012, China

【Abstract】 Objective To compare the effects of atorvastatin and rosuvastatin on lipid metabolism, atherosclerosis and vascular endothelial function in patients with coronary heart disease. Methods From June 2017 to October 2018, 300 patients with coronary heart disease admitted to the Second People’s Hospital of Nanyang were divided into atorvastatin group (156 cases) and rosuvastatin group (144 cases) according to the random digital table method. The two groups were given basic treatment, and the atorvastatin group was given atorvastatin calcium tablets, 40 mg/time, once a night, while the rosuvastatin group was given rosuvastatin calcium tablets, 10 mg/time, once a day. All patients were treated continuously for 6 months. The blood lipid index, atherosclerosis degree related index and brachial artery diameter change percentage were measured before and after treatment. Results After 6 months of treatment, the total cholesterol [ (3.02 ± 0.84) mmol/L ] , triglyceride [ (1.25 ± 0.41) mmol/L ] , low-density lipoprotein [ (1.70 ± 0.52) mmol/L ] , high-density lipoprotein [ (1.72 ± 0.37) mmol/L ] , and LDL-C [ (1.70 ± 0.63) mmol/L ] were significantly lower in the rosuvastatin group than those in the atorvastatin group [ (3.55 ± 0.92) mmol/L , (1.69 ± 0.63) mmol/L , (2.05 ± 0.68) mmol/L ] , the differences were statistically significant (t = 7.681,5.115,6.207, all P < 0.05). The HDL-C [ (1.72 ± 0.37) mmol/L ] in the rosuvastatin group was significantly higher than that of the atorvastatin group [ (1.40 ± 0.32) mmol/L ] , the difference was statistically significant (t =5.308, P < 0.05). The differences were statistically significant (t = 4.276,7.681,5.115,6.207, all P < 0.05). The treatment前后测定患者血脂指标，动脉粥样硬化程度相关指标，肱动脉内径变化百分率，颈动脉斑块积分，冠状动脉狭窄程度评分，股动脉内径变化百分率，并统计分析比较。Results After 6 months of treatment, the total cholesterol [ (3.02 ± 0.84) mmol/L ] , triglyceride [ (1.25 ± 0.41) mmol/L ] , low-density lipoprotein [ (1.70 ± 0.52) mmol/L ] , high-density lipoprotein [ (1.72 ± 0.37) mmol/L ] , and LDL-C [ (1.70 ± 0.63) mmol/L ] were significantly lower in the rosuvastatin group than those in the atorvastatin group [ (3.55 ± 0.92) mmol/L , (1.69 ± 0.63) mmol/L , (2.05 ± 0.68) mmol/L ] , the differences were statistically significant (t = 7.681,5.115,6.207, all P < 0.05). The HDL-C [ (1.72 ± 0.37) mmol/L ] in the rosuvastatin group was significantly higher than that of the atorvastatin group [ (1.40 ± 0.32) mmol/L ] , the difference was statistically significant (t =5.308, P < 0.05). The differences were statistically significant (t = 4.276,7.681,5.115,6.207, all P < 0.05). Conclusion The effects of atorvastatin and rosuvastatin on lipid metabolism, atherosclerosis and vascular endothelial function are better than those of the atorvastatin group. The rosuvastatin group had a better effect on the treatment of coronary artery disease than the atorvastatin group. The rosuvastatin group had a better effect on the treatment of coronary artery disease than the atorvastatin group.
stenosis degree score \[(23.86 \pm 3.29)\text{ points}\] in the rosvastatin group were significantly lower than those before treatment \[(4.60 \pm 0.75)\text{ points}, (33.74 \pm 4.07)\text{ points}\] and at the same time in the atorvastatin group \[(4.39 \pm 0.64)\text{ points}, (27.90 \pm 3.61)\text{ points}\], the differences were statistically significant \[(t = 4.276, 17.504, 4.735, 8.415, \text{all } P < 0.05)\]. After 6 months of treatment, the change percentages of brachial artery diameter in the atorvastatin group and the rosvastatin group were \[(8.23 \pm 2.59)\% , (8.75 \pm 2.71)\%\], respectively, which were significantly higher than those before treatment \[(6.48 \pm 1.92)\% , (6.51 \pm 1.86)\%\], the differences were statistically significant \[(t = 10.780, 11.534, \text{all } P < 0.05)\]. The change percentage of brachial artery diameter in the rosvastatin group was significantly higher than that in the atorvastatin group, the difference was statistically significant \[(t = 5.530, P < 0.05)\].

**Conclusion**  Rosuvastatin is superior to atorvastatin in reducing blood lipid, improving atherosclerosis and vascular endothelial relaxation function in patients with coronary heart disease, and can be widely used.

**Key words**  Coronary disease;  Atorvastatin;  Rosuvastatin;  Lipid metabolism;  Carotid intima-media thickness;  Carotid plaque score;  Coronary stenosis score;  Vascular endothelial function

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.003
Effects of metoprolol tartrate combined with atorvastatin calcium on lipid metabolism, vascular endothelial function and inflammatory factors in patients with essential hypertension

Li Feixiang, Peng Jiren, Ma Jiaojiao
Department of Cardiology, the People’s Hospital of Dongyang, Zhejiang 322100, China

Abstract Objective To investigate the effect of metoprolol tartrate combined with atorvastatin calcium on lipid metabolism, vascular endothelial function and inflammatory factors in patients with essential hypertension. Methods From January 2015 to December 2018, 80 patients with essential hypertension admitted to the People’s Hospital of Dongyang were divided into observation group (40 cases) and control group (40 cases) according to the random digital table method. On the basis of routine treatment, the control group was treated with atorvastatin calcium, while the observation group was treated with atorvastatin calcium and metoprolol. The course of treatment in both two groups was 6 months. The changes of systolic and diastolic blood pressure, lipid metabolism, endothelial function and inflammatory factors were compared before and after treatment. Results The total effective rate of the observation group (92.50%, 37/40) was higher than that of the control group (70.00%, 28/40) (x^2 = 6.646, P < 0.05). The systolic blood pressure [(123.15 ± 7.89) mmHg] and diastolic blood pressure [(75.52 ± 3.89) mmHg] in the observation group were lower than those in the control group [(134.29 ± 10.31) mmHg and (82.31 ± 4.04) mmHg] (t = 5.427, 7.657, all P < 0.05). The level of serum NO [(69.74 ± 5.46) mmol/L] in the observation group was higher than that in the control group [(57.87 ± 6.37) mmol/L], while ET-1 [(56.48 ± 5.49) mg/L] in the observation group was lower than that in the control group [(73.24 ± 7.18) mg/L] (t = 5.757, 12.000, 10.590, all P < 0.05). Conclusion Metoprolol tartrate combined with atorvastatin calcium is effective in the treatment of essential hypertension, and can improve lipid metabolism, vascular endothelial function, and reduce inflammation.

Key words Hypertension; Metoprolol tartrate; Atorvastatin calcium; Lipid metabolism; Vascular endothelial function; Inflammatory factors

DOI:10.3760/cma.j.issn.1008-6706.2020.15.004
前列地尔对经皮冠状动脉介入术后患者心肌保护作用及炎性因子和氧化应激的影响

阮政文
浙江省余姚市人民医院心内科 315400

【摘要】 目的 探讨前列地尔对急性ST段抬高型心肌梗死（STEMI）行经皮冠状动脉介入术（PCI）术后患者心肌保护作用及炎性因子和氧化应激的影响。方法 选取余姚市人民医院2018年12月至2019年12月行PCI术的STEMI患者150例，采用随机数字法分为观察组75例与对照组75例。对照组采用常规治疗，观察组在对照组基础上联合前列地尔治疗。两组疗程均为14 d。比较两组治疗前后心肌酶、心肌酶、炎性因子和氧化应激水平变化。结果 观察组治疗后左心室射血分数[(52.31±3.25)%]高于对照组[(47.28±2.19)%]，而左室舒张末期径[(42.13±4.35)mm]低于对照组[(48.24±3.90)mm]，差异均有统计学意义(t=11.15,9.057,均P<0.05)；观察组治疗后肌酸激酶同工酶[(15.42±2.80)μg/L]低于对照组[(21.13±2.35)μg/L]，而肌钙蛋白T[(0.37±0.06)μg/L]高于对照组[(0.26±0.05)μg/L]，差异均有统计学意义(t=13.528,16.337,均P<0.05)；观察组治疗后肿瘤坏死因子α[(6.47±1.36)ng/L]、白细胞介素6[(7.03±1.20)ng/L]、超敏C反应蛋白[(3.27±0.87)mg/L]均低于对照组[(9.82±2.01)ng/L,11.21±1.73)ng/L,5.96±1.07)ng/L]，而丙二醛[(8.21±1.45)μmol/L]低于对照组[(11.26±7.88)μmol/L]，差异均有统计学意义(t=11.21±7.11.505,均P<0.05)。结论 前列地尔对STEMI行PCI术后患者心肌具有良好保护作用，且可减轻炎性反应及改善患者氧化应激反应。

【关键词】 经皮冠状动脉介入疗法；心肌梗死；心功能；心肌酶；炎性因子；氧化应激；前列地尔

DOI:10.3760/cma.j.issn.1008-6706.2020.15.005

Effects of alprostadil on myocardial protection, inflammatory factors and oxidative stress in patients with acute ST segment elevation myocardial infarction after PCI

Ruan Zhengwen
Department of Cardiology, the People's Hospital of Yuyao, Yuyao, Zhejiang, 315400, China

【Abstract】Objective To investigate the effects of alprostadil on myocardial protection, inflammatory factors and oxidative stress in patients with acute ST segment elevation myocardial infarction (STEMI) after percutaneous coronary intervention (PCI). Methods From December 2018 to December 2019, 150 STEMI patients who underwent PCI in the People’s Hospital of Yuyao were divided into observation group (75 cases) and control group (75 cases) according to the random digital table method. The patients in the control group were treated with routine therapy, while those in the observation group were treated with alprostadil on the basis of the control group. The course of treatment in both two groups was 14 days. The changes of cardiac function, myocardial enzymes, inflammatory factors and oxidative stress were compared before and after treatment. Results The LVEF [(52.31±3.25)]% in the observation group was higher than that in the control group [(47.28±2.19)%], and the LVEDD [(42.13±4.35)mm] in the observation group was lower than that in the control group [(48.24±3.90)mm], the differences were statistically significant(t=11.15,9.057, all P<0.05). After treatment, the CK-MB [(15.42±2.80)μg/L] in the observation group was lower than that in the control group [(21.13±2.35)μg/L], while the cTnT [(0.37±0.06)μg/L] in the observation group was higher than that in the control group [(0.26±0.05)μg/L], the differences were statistically significant(t=13.528,16.337, all P<0.05). After treatment, the levels of TNF-α [(6.47±1.36)ng/L], IL-6 [(7.03±1.20)ng/L] and hs-CRP [(3.27±0.87)ng/L] in the observation group were lower than those in the control group [(9.82±2.01)ng/L,11.21±1.73)ng/L,5.96±1.07)ng/L], while the MDA [(8.21±1.45)μmol/L] in the observation group was lower than that in the control group [(11.26±7.88)μmol/L], the differences were statistically significant(t=11.21±7.11.505, all P<0.05). Conclusion Alprostadil has good protective effect on the myocardium of patients with STEMI after PCI, and can reduce the inflammatory response and improve the oxidative stress response of patients.

【Key words】 Percutaneous coronary intervention; Myocardial infarction; Cardiac function; Myocardial enzymes; Inflammatory factors; Oxidative stress; Prostaglandin

DOI:10.3760/cma.j.issn.1008-6706.2020.15.005
心电图 QRS 波时限延长对老年高血压合并心力衰竭患者心脏不良事件的预测价值

周蓉1 张懿2
1浙江中医药大学附属第三医院特检科, 杭州 310007; 2浙江省新华医院心电图室, 杭州 310000

【摘要】目的 探讨心电图 QRS 波时限延长对老年高血压合并心力衰竭患者心脏不良事件（MACE）的预测价值。方法 选取 2015 年 4 月至 2018 年 5 月浙江中医药大学附属第三医院及浙江省新华医院收治的老年高血压合并心力衰竭患者 226 例，患者入院后即刻进行 18 导联心电图检查，根据 QRS 波时限进行分组，分为 QRS 波时限≤120 ms 组 157 例、QRS 波时限＞120 ms 组 69 例。比较两组患者心功能相关指标、血清 N 末端脑钠肽前体（NT-proBNP）水平及出院 6 个月 MACE 发生率；比较 MACE 发生患者与未发生 MACE 患者入院 QRS 波时限，并采用 ROC 曲线分析 QRS 波时限对患者 MACE 的预测价值。结果 QRS 波时限＞120 ms 组患者左室射血分数（LVEF）（37.49 ± 4.03）% 明显低于 QRS 波时限≤120 ms 组的（44.37 ± 4.92）%（t = 10.205, P < 0.05）; QRS 波时限＞120 ms 组患者左室舒张末期内径（LVEDD）（59.03 ± 3.15）mm、左心室质量指数（LVMI）（147.38 ± 16.28）g/m²、血清 NT-proBNP（1,097.59 ± 216.49）ng/L, 均显著高于 QRS 波时限≤120 ms 组的（56.39 ± 3.97）mm、（138.96 ± 15.36）g/m² 及（825.36 ± 185.36）ng/L（t = 4.887, 3.726, 9.649, 均 P < 0.05）。QRS 波时限＞120 ms 组 MACE 发生率为 53.62%（37/69），明显高于 QRS 波时限≤120 ms 组的 20.38%（32/157）（χ² = 24.973, P < 0.05）。QRS 波时限与 LVEF 呈显著相关关系（r = -0.316, P < 0.05），与 LVEDD、LVMI 及血清 NT-proBNP 均呈显著正相关（r = 0.362, 0.405, 0.378, 均 P < 0.05）。发生 MACE 患者入院 QRS 波时限为（137.64 ± 21.05）ms, 明显长于无 MACE 患者的 (112.65 ± 19.85) ms（t = 8.556, P < 0.05）。采用 ROC 曲线分析 QRS 波时限对 MACE 预测价值，曲线下面积为 0.852。

结论 QRS 波时限与老年高血压合并心力衰竭患者心功能及血清 NT-proBNP 水平密切相关，QRS 波时限延长对患者 MACE 发生具有良好的预测价值，可作为临床监测指标。

【关键词】 心电描记术; QRS 波时限延长; 高血压; 心力衰竭; 心脏不良事件; 每搏输出量; 左室舒张末期内径; 左心室质量指数; N 末端脑钠肽前体; 老年人

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.006

Predictive value of prolonged QRS wave duration on adverse cardiac events in elderly patients with hypertension and heart failure

Zhou Rong1 Zhang Yi2
1Department of Special Inspection, the Third Affiliated Hospital of Zhejiang University of Traditional Chinese Medicine, Hangzhou, Zhejiang 310007, China; 2Electrocardiogram Room, Zhejiang Xinhua Hospital, Hangzhou, Zhejiang 310000, China

【Abstract】Objective To investigate the predictive value of prolonged QRS duration of electrocardiogram for adverse cardiac events in elderly patients with hypertension and heart failure. Methods From April 2015 to May 2018, 226 elderly patients with hypertension complicated with heart failure were selected in the Third Affiliated Hospital of Zhejiang University of Traditional Chinese Medicine. After admission, 18 leads ECG were examined immediately. According to the time limit of QRS wave, the patients were divided into 157 cases of QRS wave ≤120 ms group and 69 cases of QRS wave > 120 ms group. The related indicators of cardiac function, serum N-terminal brain natriuretic peptide precursor (NT-proBNP) and the incidence of major adverse cardiovascular events (MACE) at 6 months after discharge were compared between the two groups. The time limit of QRS wave in patients with MACE and those without MACE was compared, and the predictive value of QRS wave time limit in patients with MACE was analyzed by...
ROC curve. **Results**  The LVEF [ (37.49 ± 4.03) % ] of the patients with QRS wave duration > 120 ms was significantly lower than that of the patients with QRS wave duration < 120 ms [ (44.37 ± 4.92) % ] (t = 10.205, P < 0.05). The LVEDD [ (59.03 ± 3.15) mm ], LVMI [ (147.38 ± 16.28) g/m² ] and serum NT-proBNP [ (1097.59 ± 216.49) ng/L ] in the patients with QRS wave duration > 120 ms were significantly higher than those in the patients with QRS wave duration < 120 ms [ (56.39 ± 3.97) mm, (138.96 ± 15.36) g/m² and (825.36 ± 185.36) ng/L ] (t = 4.887, 3.726, 9.649, all P < 0.05). The incidence of MACE in the patients with QRS duration > 120 ms (53.62%) was significantly higher than that in the patients with QRS duration < 120 ms (20.38%) (χ² = 24.973, P < 0.05). The QRS wave duration was negatively correlated with LVEF (r = -0.316, P < 0.05), and positively correlated with LVEDD, LVMI and serum NT-proBNP (r = 0.362, 0.405, 0.378, P < 0.05). The time limit of QRS wave in the patients with MACE [ (112.65 ± 19.85) ms ] was significantly longer than that in the patients without MACE [ (137.64 ± 21.05) ms ] (t = 8.556, P < 0.05). The predictive value of QRS wave duration of ROC curve for MACE was 0.852. **Conclusion**  QRS wave duration is closely related to cardiac function and serum NT-proBNP level in elderly patients with hypertension and heart failure, and prolonged QRS wave duration has good predictive value for adverse cardiac events, which can be used as a clinical monitoring index.

**Key words**  Electrocardiography;  QRS wave duration extension;  Hypertension;  Heart failure;  Cardiac adverse events;  Stroke volume;  Left ventricular end diastolic diameter;  Left ventricular mass index;  N terminal pro brain natriuretic peptide;  Aged

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.006
【摘要】目的 探讨稳心颗粒联合索他洛治疗心律失常患者的疗效及对患者血浆血管紧张素Ⅱ、C 反应蛋白和氨基端脑钠肽前体水平的影响。方法 选取台州市市中心医院 2018 年 1 月至 2019 年 10 月收治的心律失常患者 162 例，按照随机数字表法分为观察组 (81 例) 与对照组 (81 例)。对照组患者给予索他洛尔治疗，观察组在对照组基础上联合稳心颗粒治疗。两组疗程均为 2 个月。比较两组临床疗效、治疗前后心功能、Ang Ⅱ、CRP 和 NT-proBNP 水平变化及不良反应。结果 观察组总有效率 (92.59%,75/81) 高于对照组 (77.78%,63/81) (χ²=7.044,P<0.05)。观察组治疗后左室舒张末期直径 (LVEDD) (53.18±3.09) mm，左室收缩末期内径 (LVESD) (52.19±2.35) mm，均低于对照组的 (58.97±2.73) mm，(57.79±2.65) mm，而每搏输出量 (SV) (76.93±3.67) mL，左室射血分数 (LVEF) (53.90±2.64)%，均高于对照组的 (71.35±2.87) mL，(46.75±2.18)% (t=12.638,14.230,10.779,18.795，P<0.05)。观察组治疗后血浆 AngⅡ (96.52±12.16) ng/L，CRP (4.30±0.69) mg/L 和 NT-proBNP (394.25±47.15) ng/L，均低于对照组的 (155.42±23.15) ng/L，(6.27±0.78) mg/L 和 (565.29±56.72) ng/L (t=13.389,17.025,20.870,均 P<0.05)。观察组不良反应发生率为 11.11% (9/81)，低于对照组的 30.86% (25/81) (χ²=9.529,P<0.05)。结论 稳心颗粒联合索他洛治疗心律失常患者疗效显著，可降低血浆 AngⅡ、CRP 和 NT-proBNP 水平，改善心功能，且不良反应发生率低。

【关键词】心律失常；窦性；疗效；心功能；血管紧张素Ⅱ；C 反应蛋白；氨基端脑钠肽前体；不良反应；稳心颗粒；索他洛尔

Effect of Wenxin granule combined with sotalol in the treatment of arrhythmia and its influence on the levels of Ang II, CRP and NT-proBNP

Chen Wanfei, Li Zhenzhen, Shang Xiangyu
Department of Cardiology, Taizhou Central Hospital, Affiliated Hospital of Taizhou University, Taizhou, Zhejiang 318000, China

【Abstract】Objective To investigate the therapeutic effect of Wenxin granule combined with sotalol on patients with arrhythmia and its influence on the levels of plasma angiotensin II (Ang II), C-reactive protein (CRP) and NT-proBNP. Methods From January 2018 to October 2019, 162 patients with arrhythmia admitted to Taizhou Central Hospital were divided into observation group (81 cases) and control group (81 cases) according to the random digital table method. The control group was treated with sotalol, and the observation group was treated with Wenxin granule on the basis of the control group. The course of treatment in both two groups was 2 months. The changes of cardiac function, Ang II, CRP and NT-proBNP levels, as well as adverse reactions were compared before and after treatment. Results The total effective rate of the observation group (92.59%,75/81) was higher than that of the control group (77.78%,63/81) (χ²=7.044,P<0.05). After treatment, the LVEDD [(53.18±3.09) mm] and LVESD [(52.19±2.35) mm] were lower than those in the control group [(58.97±2.73) mm and (57.79±2.65) mm], while the SV [(76.93±3.67) mL] and LVEF [(53.90±2.64) %] in the observation group were higher than those in the control group [(71.35±2.87) mL and (46.75±2.18) %], the differences were statistically significant (t=12.638,14.230,10.779,18.795, all P<0.05). The plasma Ang II [(96.52±12.16) ng/L], CRP [(4.30±0.69) mg/L] and NT-proBNP [(394.25±47.15) ng/L] in the observation group were lower than those in the control group [(155.42±23.15) ng/L, (6.27±0.78) mg/L and (565.29±56.72) ng/L] (t=13.389,17.025,20.870, all P<0.05). The incidence of adverse reactions in the observation group (11.11%) was lower than that in the control group (30.86%) (χ²=9.529,P<0.05). Conclusion Wenxin granule combined with sotalol is effective in the treatment of arrhythmia, which can reduce the plasma levels of Ang II, CRP and NT-proBNP, improve the heart function and has no obvious adverse reactions.

【Key Words】Arrhythmia, sinus; Efficacy; Cardiac function; Angiotension II; C-reactive protein; Amino terminal pro brain natriuretic peptide; Adverse reactions; Wenxin Granules; Sotalol

DOI:10.3760/cma.j.issn.1008-6706.2020.15.007
论著

继发性甲状旁腺功能亢进症术后迟发性出血的原因分析
冯剑平 唐诗彬 叶剑 谭健辉
南方医科大学顺德医院甲状腺乳腺外科,广东省佛山 528308
通信作者:唐诗彬,Email: tangshibin1966@qq.com, 电话:0757-22318709

【摘要】目的 探讨继发性甲状旁腺功能亢进症术后迟发性出血的原因及处理措施。方法 回顾性分析南方医科大学顺德医院甲状腺外科2014年11月至2018年11月手术治疗的继发性甲状旁腺功能亢进症患者56例的临床资料,对其中5例术后迟发性出血的患者进行原因分析。结果 5例术后出血患者均为终末期肾病血液透析患者(5/56,8.93%),其中颈前静脉出血1例,甲状腺断面渗血1例,舌骨下肌群渗血3例,环甲肌渗血1例,所有病例经及时处理止血后,伤口甲级愈合,无死亡病例。结论 继发性甲状旁腺术后出血发生率不低,做好围手术期预防措施,早期明确诊断及处理,能减少其并发症及危害。

【关键词】甲状旁腺功能亢进症,继发性;肾病;透析;甲状旁腺切除术;手术后出血

基金项目:广东省医学科学技术研究基金项目(B2016051)
DOI:10.3760/cma.j.issn.1008-6706.2020.15.008

Analysis on the causes of delayed postoperative hemorrhage in patients with secondary hyperparathyroidism
Feng Jianping, Tang Shibin, Ye Jian, Tan Jianhui
Department of Thyroid and Breast Surgery, Shunde Hospital, Southern Medical University, Foshan, Guangdong 528308, China
Corresponding author: Tang Shibin, Email: tangshibin1966@qq.com, Tel:0757-22318709

【Abstract】Objective To study the clinical characteristics and treatment measures of postoperative bleeding in hyperparathyroidism surgery. Methods A total of 56 patients with secondary hyperparathyroidism in Shunde Hospital from November 2014 to November 2018 underwent parathyroidectomy, from which 5 cases developed postoperative hemorrhage were collected and analyzed. Results Among the 56 patients, bleeding after operation were found in 5 cases (5/56, 8.93%), including hemorrhage of anterior jugular vein in 1 case, hemorrhage of thyroid wound after thyroid mass resection in 1 case, hemorrhage of anterior jugular muscles in 3 cases, hemorrhage of cricoarytenoid muscle in 1 case. All patients were cured by treatment in time without death. Conclusion Early diagnosis and proper treatment are crucial for reducing the complications of post-parathyroidectomy bleeding.

【Key words】Hyperparathyroidism, secondary; Nephrosis; Dialysis; Parathyroidectomy; Postoperative hemorrhage

Fund program: Medical Science and Technology Research Fund of Guangdong Province, China (B2016051)
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.008
经阴道超声检测对高危孕妇发生未足月胎膜早破的预测价值

陈洪霞  蔡晓霞
温州医科大学附属平阳医院妇产科  325400

【摘要】目的 探讨经阴道超声检测宫颈长度及形态对高危孕妇发生未足月胎膜早破的预测价值。方法 选取温州医科大学附属平阳医院2014年1月至2018年10月收治的高危孕妇150例，根据是否发生未足月胎膜早破分为对照组91例（未发生胎膜早破）和观察组59例（胎膜早破）。结果 观察组宫颈长度缩短、宫颈长度和宫颈呈漏斗状例数分别为（16.9±2.1）mm、（13.7±6.9）mm和37例（62.71%），对照组分别为（20.2±2.8）mm、（18.3±8.0）mm和40例（43.96%），两组差异具有统计学意义（t=9.268, 6.056, χ²=5.297, P<0.05）。阴道超声检测宫颈长度<10mm、漏斗形>75%的敏感性和95%可信区间分别为84.62%、0.3~3.5，漏斗形>50%的敏感性为95%、95%可信区间分别为43.59%、0.7~7.2。对照组未出现宫颈长度<10mm和漏斗形>75%、在宫颈长度<20mm的敏感性为61.54%、95%可信区间为0.2~3.0。漏斗形>25%的敏感性95%、95%可信区间分别为44.29%、0.3~3.8。结论 宫颈长度<10mm，漏斗形>75%是早产的主要原因，对未足月胎膜早破有极好的预测价值。

【关键词】超声检查，产前； 孕妇，高危； 胎膜早破； 宫颈； 长度； 形状； 预测
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.009

Predictive value of transvaginal ultrasound for detecting cervical length and morphology in premature rupture of membranes in high-risk pregnant women

Chen Hongxia, Cai Xiaoxia
Department of Obstetrics and Gynecology, Pingyang Hospital Affiliated to Wenzhou Medical University, Zhejiang 325400, China

【Abstract】Objective To explore the predictive value of cervical length and morphology detected by transvaginal ultrasound in the diagnosis of premature rupture of membranes in high-risk pregnant women. Methods From January 2014 to October 2018, 150 high-risk pregnant women admitted to Pingyang Hospital Affiliated to Wenzhou Medical University were divided into two groups according to whether premature rupture of membranes occurred. In the control group, 91 cases of premature rupture of membranes did not occur. In the observation group, 59 patients had premature rupture of membranes. The differences in cervix shortening, cervical length and funnel shape of the cervix were compared between the two groups. The differences in specificity and sensitivity between different cervical lengths and funnel-like changes were observed. Results The cervical shortening, cervical length and funnel-shape number in the observation group were (16.9±2.1) weeks, (13.7±6.9) mm and 37 cases (62.71%), respectively, which in the control group were (20.2±2.8) weeks, (18.3±8.0) mm and 40 cases (43.96%), respectively, the differences were statistically significant (t=9.268, 6.056, χ²=5.297, P<0.05). The predictive value of transvaginal ultrasound for the sensitivity of cervical length<10 mm and funnel shape>75% was too low, but the specificity was high (91.20% and 95.00%). The sensitivity and 95% confidence interval for cervical length<20 mm were 61.54%, 0.8~4.4, respectively. The sensitivity and 95% confidence interval of cervical length<15 mm were 43.59% and 0.9~6.5, respectively. The sensitivity and 95% confidence interval of funnel shape>25% were 84.62% and 0.3~3.5, respectively. The sensitivity and 95% confidence interval of funnel shape>50% were 43.59% and 0.7~7.2, respectively. In the control group, there was no cervical length<10 mm and funnel shape>75%. The sensitivity of cervical length<20 mm was 61.54%, the 95% confidence interval was 0.2~3.0. The sensitivity of funnel shape>25% and the 95% confidence interval were 44.29% and 0.3~3.8, respectively. Conclusion For cervical length<10 mm, funnel morphology>75% has excellent predictive value for premature rupture of membranes, which is the main reason for maternal preterm birth.

【Key words】Ultrasoundography, prenatal; Pregnant women, high risk; Premature rupture of membranes; Cervical; Length; Shape; Forecast
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.009
【摘要】目的 比较枸橼酸钠与低分子肝素用于有高危出血风险的血液透析患者的临床效果。方法选取运城市中心医院2016年1月至2019年1月收治的有高危出血风险的血液透析患者110例，入组前患者均未发生出血事件。采用随机数字法分为对照组（n=55）、观察组（n=55），对照组采用低分子肝素抗凝，观察组采用枸橼酸钠抗凝，比较两组凝血功能、出血事件发生情况及临床效果。 结果 观察组未发生出血事件，对照组出血事件发生率为10.91%（6/55）,两组差异有统计学意义（χ²=3.219,P=0.036）；对照组透析时血钠、血钙分别为（132.84±25.48）mmol/L，（0.87±0.12）mmol/L，均低于对照组的（148.75±26.35）mmol/L，（1.10±0.14）mmol/L（t=3.219,9.251,P<0.05）；观察组体外循环凝血0级率为94.55%（52/55）,高于对照组的50.91%（28/55）,差异有统计学意义（χ²=24.246,P<0.05）；观察组透析时部分凝血活酶时间（APTT）,穿刺点压迫时间均短于对照组，滤器使用时间长于对照组（t=14.404,7.899,9.677,P<0.05）；两组尿素氮下降率（URP）及尿素清除指数（Kt/V）,超滤量差异均无统计学意义（P>0.05）。结论 与低分子肝素相比，枸橼酸钠用于有高危出血风险的血液透析患者，可减少凝血事件的发生，降低出血事件发生率。

【关键词】血液透析滤过；高危出血；枸橼酸钠；低分子肝素；凝血功能；出血事件；血钠；血钙

DOI:10.3760/cma.j.issn.1008-6706.2020.15.010

Comparison of the effects of citric acid and low molecular weight heparin on hemodialysis patients at high risk of bleeding
Shen Huanrong
Department of Nephrology, Yuncheng Central Hospital, Yuncheng, Shanxi 044000, China

【Abstract】Objective To compare the clinical effects of citric acid and low molecular weight heparin in hemodialysis patients at high risk of bleeding. Methods From January 2016 to January 2019, 110 hemodialysis patients with high risk of bleeding in Yuncheng Central Hospital were selected and divided into control group (n=55) and observation group (n=55) according to the random digital table method. No bleeding events occurred in the patients. The control group was given anticoagulant therapy with low molecular weight heparin, and the observation group was given anticoagulant therapy with citric acid. The coagulation function, the occurrence of bleeding events and the clinical effect of the two groups were compared. Results There was no bleeding event in the observation group, and the incidence of bleeding event in the control group was 10.91% (6/55), the difference between the two groups was statistically significant (χ²=4.407,P=0.036). The blood sodium and calcium levels in the observation group were (132.84±25.48) mmol/L, (0.87±0.12) mmol/L, respectively, which were lower than those in the control group [(148.75±26.35) mmol/L, (1.10±0.14) mmol/L](t=3.219,9.251, all P<0.05). The grade 0 coagulation rate of the observation group was 94.55% (52/55), which was higher than that of the control group [50.91% (28/55)], the difference was statistically significant (χ²=24.246,P<0.05). In the observation group, the APTT and the compression time at the puncture point were shorter than those in the control group, and the use time of the filter was longer than that in the control group, the differences were statistically significant (t=14.404,7.899,9.677, all P<0.05). There were no statistically significant differences in the URP, Kt/V and UF between the two groups (all P>0.05). Conclusion Compared with low molecular weight heparin, citric acid is safe and effective for hemodialysis patients at high risk of bleeding.

【Key words】Hemodiafiltration; High-risk bleeding risk; Citrate; Low molecular weight heparin; Coagulation function; Bleeding event; Blood sodium; Blood calcium

DOI:10.3760/cma.j.issn.1008-6706.2020.15.010
腹腔镜辅助小切口下保胆取石即时缝合术治疗胆囊结石疗效观察

徐杰 王杏土 孙道中 王鹏
浙江绿城心血管病医院普外科,杭州 310000

【摘要】 目的 观察腹腔镜辅助小切口下保胆取石即时缝合术治疗胆囊结石的疗效。方法 选取浙江绿城心血管病医院普外科2017年11月至2018年11月手术治疗的胆囊结石患者90例,根据不同术式分为对照组45例、观察组45例,对照组采用腹腔镜胆囊切除术治疗,观察组采用腹腔镜辅助小切口下保胆取石即时缝合术治疗,比较两组手术相关指标、并发症及临床疗效。结果 观察组手术时间、出血量、切口长度分别为(46.5±4.2)min,(33.9±3.4)mL,(3.2±0.5)cm,短于、少于对照组的(61.8±5.3)min,(51.6±4.5)mL,(5.6±0.8)cm,差异均具有统计学意义(t=16.412,10.307,4.763,P<0.05);观察组禁食、肛门排气、下床活动、住院时间分别为(1.4±0.4)d,(1.3±0.2)d,(1.5±0.5)d,(5.4±0.9)d,均短于对照组的(2.0±0.6)d,(2.2±0.3)d,(2.4±0.7)d,(8.3±1.6)d(t=7.050,10.085,7.848,12.357,P<0.05);观察组并发症发生率为2.2%(1/45),低于对照组的13.3%(6/45)(χ²=5.001,P<0.05);观察组总有效率为95.6%(43/45),高于对照组的80.0%(36/45)(χ²=4.473,P<0.05)。结论 腹腔镜辅助小切口下保胆取石即时缝合术治疗胆囊结石的效果理想,可明显改善临床相关指标,降低并发症发生率。

【关键词】 胆囊结石病;腹腔镜检查;胆囊切除术,腹腔镜;小切口;保胆取石;时间;出血;手术后并发症;对比研究

DOI:10.3760/cma.j.issn.1008-6706.2020.15.011

Effect of laparoscopic–assisted mini–incision gallbladder–preserving lithotripsy with immediate suture on cholecystolithiasis

Xu Jie, Wang Xingtu, Sun Daizhong, Wang Peng
Department of General Surgery, Zhejiang Lyucheng Cardiovascular Hospital, Hangzhou, Zhejiang 310000, China

【Abstract】 Objective To observe the effect of laparoscopic assisted small incision in the treatment of gallstone. Methods From November 2017 to November 2018, 90 patients with gallstone were selected from the general surgery department of Zhejiang Lyucheng Cardiovascular Hospital. According to different operation methods, they were divided into control group (45 cases) and observation group (45 cases). The control group was treated with laparoscopic cholecystectomy, and the observation group was treated with laparoscopic assisted small incision and immediate suture of cholelithiasis. The operation related indicators, postoperative rehabilitation indicators, complications and clinical effect of the two groups were compared. Results The operation time, bleeding volume and incision length of the observation group were (46.5±4.2) min, (33.9±3.4) mL, (3.2±0.5) cm, respectively, which were shorter than those of the control group [(61.8±5.3) min, (51.6±4.5) mL and (5.6±0.8) cm] (t=16.412, 10.307, 4.763, all P<0.05). The time of fasting, anus exhaust, ambulation and hospitalization in the observation group were (1.4±0.4) d, (1.3±0.2) d, (1.5±0.5) d, (5.4±0.9) d, respectively, which were shorter than those in the control group [(2.0±0.6) d, (2.2±0.3) d, (2.4±0.7) d, (8.3±1.6) d] (t=7.050, 10.085, 7.848, 12.357, all P<0.05). The incidence of complications in the observation group was 2.2%(1/45), which was lower than 13.3%(6/45) (χ²=5.001, P<0.05); the observation group total effect rate of 95.6%(43/45), which was higher than 80.0%(36/45) in the control group (χ²=4.473, P<0.05). Conclusion The effect of laparoscopic assisted small incision cholecystolithotomy and immediate suture is ideal, which can significantly improve the clinical indicators and reduce the incidence of complications.

【Key words】 Cholecystolithiasis; Laparoscopy; Cholecystectomy, laparoscopic; Small incision; Preserving gallbladder and removing calculus; Time; Hemorrhage; Postoperative complications; Comparative study

DOI:10.3760/cma.j.issn.1008-6706.2020.15.011
组织多普勒成像 Tei 指数对新生儿窒息后心肌损伤程度、右心功能的评估价值

季坚卫 杨莲芳 龚向英
浙江省, 义乌市中心医院新生儿科 322000

【摘要】目的 探讨组织多普勒成像 Tei 指数对新生儿窒息后心肌损伤程度、右心功能的评估价值。方法 选择义乌市中心医院 2018 年 3 月至 2019 年 5 月住院治疗的新生儿窒息 62 例 (窒息组) 为研究对象, 根据出生 Apgar 评分将其分为轻度窒息组 41 例、重度窒息组 21 例; 选择同期在该院娩出的健康足月新生儿 30 例为对照组。比较窒息组与对照组新生儿的 Tei 指数, 以及不同严重程度窒息新生儿血清心肌损伤标志 [氨基末端脑钠尿肽 (NT-proBNP)、肌钙蛋白 (cTn I)、肌酸激酶同工酶 (CK-MB)、乳酸脱氢酶 (LDH) ]、超声右心功能参数(室壁射血分数 (RVEF), E/A 值及 E/A 比值) 水平的差异。采用 Pearson 检验评估新生儿窒息 Tei 指数与心肌损伤指标、右心功能参数水平的相关性。结果 窒息组患儿的 Tei 指数为 (0.38 ± 0.05), 高于对照组的 (0.27 ± 0.04) (t = 10.521, P < 0.05); 重度窒息组 Tei 指数为 (0.43 ± 0.06), 高于轻度窒息组的 (0.34 ± 0.05) (t = 6.264, P < 0.05)。重度窒息组血清 NT-proBNP、cTn I、CK-MB、LDH 分别为 (1 164 ± 27 ± 231.64)ng/L、(0.33 ± 0.05)μg/L、(27.11 ± 3.65)U/L、(298.20 ± 37.57)U/L, 均高于轻度窒息组的 (590.38 ± 73.91)ng/L、(0.25 ± 0.04)μg/L、(18.36 ± 2.34)U/L、(200.71 ± 24.39)U/L (t = 14.576, 6.839, 11.463, 12.338, P < 0.05); 重度窒息组超声 RVEF 水平, E/A 比值分别为 (52.94 ± 6.10)%、(0.94 ± 0.11), 均低于轻度窒息组的 (56.83 ± 5.97)%、(1.02 ± 0.13) (t = 2.411, 2.457, P < 0.05)。相关性分析发现, 新生儿窒息病例的 Tei 指数与血清 NT-proBNP、cTn I、CK-MB、LDH 水平呈正相关, 与 RVEF 水平呈负相关, 与 E/A 比值呈正相关 (r = 0.745, 0.598, 0.703, 0.665, -0.711, -0.692, P < 0.05)。结论 新生儿窒息病例的 Tei 指数异常增高, 可客观反映患儿的心肌损伤及右心功能减退程度。

【关键词】窒息, 新生儿; 超声心动描记术; 多普勒, 彩色; Tei 指数; 心肌损伤; 心室功能; 右心功能; 右心功能参数

【基金项目】浙江省义乌市科技计划项目 (18-3-73)
asphyxia group \[ (590.38 \pm 73.91) \text{ng/L}, (0.25 \pm 0.04) \mu \text{g/L}, (18.36 \pm 2.34) \text{U/L}, (200.71 \pm 24.39) \text{U/L} \] \( t = 14.576, 6.839, 11.463, 12.338, \text{all } P < 0.05 \). The ultrasonic RVEF level, E/A ratio in the severe asphyxia group were \( (52.94 \pm 6.10) \%, (0.94 \pm 0.11) \), respectively, which were lower than those in the mild asphyxia group \[ (56.83 \pm 5.97) \%, (1.02 \pm 0.13) \] \( t = 2.411, 2.547, \text{all } P < 0.05 \). Correlation analysis found that Tei index was positively correlated with NT - proBNP, cTn - I, CK - MB, LDH levels, and negatively correlated with RVEF level, and positively correlated with E/A ratio in neonatal asphyxia cases (r = 0.745, 0.598, 0.703, 0.665, −0.711, −0.692, all P < 0.05). Conclusion Abnormal increasing of Tei index in neonatal asphyxia cases can objectively reflect the extent of myocardial injury and right heart function decline in children.

【Key words】 Asphyxia, neonatorum; Echocardiography, doppler, color; Tei index; Myocardial damage; Ventricular function, right

Fund program: Science and Technology Planning Project of Yiwu City, Zhejiang Province (18-3-73)

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.012
老年人动脉瘤性蛛网膜下腔出血
继发癫痫的相关因素分析

张军 李汉永 罗卫东 熊妍 喻灿 李旭成
武汉市中医医院重症医学科 430000

【摘要】目的：探讨老年人动脉瘤性蛛网膜下腔出血继发癫痫的相关因素。方法：选取武汉市中医医院2015年1月至2019年1月收治的老年动脉瘤性蛛网膜下腔出血患者213例，根据是否继发癫痫分为癫痫组46例与无癫痫组167例。采用单因素分析影响老年人动脉瘤性蛛网膜下腔出血继发癫痫的相关因素，采用多因素logistic回归分析影响老年人动脉瘤性蛛网膜下腔出血继发癫痫危险因素。结果：单因素分析结果显示，两组性别、年龄、合并糖尿病和吸烟史差异均无统计学意义（均P>0.05）；癫痫组与无癫痫组合并高血压（15例比22例）、责任动脉瘤位于大脑中动脉（22例比24例）、动脉瘤数量多发（23例比41例）、颅内血肿（15例比26例）、脑积水（15例比21例）和神经功能后遗症（14例比20例）差异均有统计学意义（χ²=9.491，23.840, 11.113, 6.737, 10.306, 9.161, 均P<0.05）。多因素分析结果显示，合并高血压、动脉瘤位于大脑中动脉、多发动脉瘤、颅内血肿、脑积水和神经功能后遗症共同影响老年人动脉瘤性蛛网膜下腔出血继发癫痫危险因素[OR (95% CI) 分别为2.361 (1.476~3.421), 3.012 (1.935~1.845), 1.494 (1.027~1.845), 2.785 (1.684~3.982), 1.920 (1.283~2.984), 1.637 (1.171~2.316) ]。结论：老年人动脉瘤性蛛网膜下腔出血继发癫痫影响因素较多，为降低继发癫痫发生，应针对上述危险因素采取预防措施。

【关键词】动脉瘤；蛛网膜下腔出血；癫痫；高血压；大脑中动脉；颅内出血；脑积水；老年人；因素分析，统计学

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.013

Analysis of related factors of epilepsy secondary to aneurysmal subarachnoid hemorrhage in the elderly

Zhang Jun, Li Hanyong, Luo Weidong, Xiong Yan, Yu Can, Li Xucheng
Department of Critical Medicine, Wuhan Hospital of Traditional Chinese Medicine, Wuhan, Hubei 430000, China

Corresponding author: Li Xucheng, Email: 15327355513@163.com, Tel: 027-82785120

【Abstract】Objective: To explore the related factors of epilepsy secondary to aneurysmal subarachnoid hemorrhage in the elderly. Methods: From January 2015 to January 2019, 213 elderly patients with aneurysmal subarachnoid hemorrhage admitted to Wuhan Hospital of Traditional Chinese Medicine were divided into epilepsy group (46 cases) and non-epilepsy group (167 cases) according to whether secondary epilepsy occurred. Univariate analysis was used to analyze the related factors affecting epilepsy secondary to aneurysmal subarachnoid hemorrhage in the elderly, and multivariate logistic regression was used to analyze the risk factors of epilepsy secondary to aneurysmal subarachnoid hemorrhage in the elderly. The investigation factors included sex, age, hypertension, diabetes mellitus, smoking history, location of responsible aneurysms, number of aneurysms, intracranial hematoma, hydrocephalus and neurological sequelae. Results: Univariate analysis showed that there were no statistically significant differences in sex, age, history of diabetes mellitus and smoking between the two groups (all P>0.05). There were statistically significant differences between the epilepsy group and non-epilepsy group in hypertension (15 cases vs. 22 cases), location of responsible aneurysms in middle cerebral artery (22 cases vs. 24 cases), number of aneurysms (23 cases vs. 41 cases), intracranial hematoma (15 cases vs. 26 cases), hydrocephalus (15 cases vs. 21 cases) and neurological sequelae (14 cases vs. 20 cases) (χ²=9.491, 23.840, 11.113, 6.737, 10.306, 9.161, all P<0.05). The results of multivariate analysis showed that hypertension, middle cerebral artery, multiple aneurysms, intracranial hematoma, hydrocephalus and neurologic sequelae were risk factors for epilepsy secondary to aneurysmal subarachnoid hemorrhage in the elderly [OR (95% CI) = 2.361 (1.476~3.421), 3.012 (1.935~1.845), 1.494 (1.027~1.845), 2.785 (1.684~3.982), 1.920 (1.283~2.984), 1.637 (1.171~2.316)]. Conclusion: There are many factors influencing secondary epilepsy in elderly patients with aneurysmal subarachnoid hemorrhage. In order to reduce the incidence of secondary epilepsy, preventive measures should be taken against the above risk factors.

【Key words】Aneurysm; Subarachnoid hemorrhage; Epilepsy; Hypertension; Middle cerebral artery; Intracranial hemorrhages; Hydrocephalus; Age; Factor analysis, statistical

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.013
赖氨葡锌联合消旋卡多曲治疗小儿轮状病毒性肠炎的临床观察

纪菲菲
浙江省温州市人民医院温州市妇女儿童医院儿科 325000

【摘要】目的探讨赖氨葡锌颗粒联合消旋卡多曲多曲治疗小儿轮状病毒性肠炎的临床疗效及对心肌酶指标的影响。方法选取2018年7月至2019年7月温州市人民医院收治的轮状病毒性肠炎患儿110例为研究对象，按照随机数字表法分为对照组和研究组，每组55例。对照组患儿给予消旋卡多曲颗粒治疗，研究组患儿给予赖氨葡锌颗粒联合消旋卡多曲治疗。两组疗程均为7 d。记录治疗期间药物不良反应，统计患儿腹泻停止时间、发热消退时间、呕吐停止时间及住院时间，分别于治疗前后检测患儿血清心肌酶含量，评价患儿的疗效。结果研究组腹泻停止时间、发热消退时间、呕吐停止时间及住院时间（2.61 ± 0.48）d、（2.17 ± 0.54）d、（4.03 ± 0.82）d均显著短于对照组（3.84 ± 0.82）d、（2.76 ± 0.63）d、（3.39 ± 0.71）d、（5.42 ± 1.07）d，差异均有统计学意义（\( t = 6.207, 8.154, 7.316, 5.593 \)），均\( P < 0.05 \）。研究组总有效率为94.54%（52/55），显著高于对照组的80.00%（44/55），差异有统计学意义（\( \chi^2 = 5.238, P < 0.05 \））。研究组治疗后血清磷酸肌酸激酶、磷酸肌酸激酶同功酶和乳酸脱氢酶含量（35.02 ± 5.36）U/L、（92.83 ± 9.62）U/L、（112.09 ± 12.73）U/L，均显著低于对照组（46.54 ± 6.93）U/L、（118.36 ± 10.83）U/L、（118.36 ± 10.83）U/L，差异均有统计学意义（\( t = 7.629, 10.637, 9.592 \），均\( P < 0.05 \））。治疗期间，两组患儿恶心、便秘、皮疹和嗜睡等药物不良反应发生率差异无统计学意义（\( \chi^2 = 0.101, P = 0.751 \））。结论与消旋卡多曲单独治疗比较，赖氨葡锌颗粒联合消旋卡多曲可有效缩短轮状病毒性肠炎患儿临床症状改善时间，提高总体疗效，降低心肌损伤程度，且不增加不良反应。

【关键词】轮状病毒感染；肠炎；消旋卡多曲；赖氨葡锌颗粒；肌酸激酶；肌酸激酶MB型；乳酸脱氢酶类；儿童

DOI:10.3760/cma.j.issn.1008-6706.2020.15.014

Clinical observation of the effect of lysine hydrochloride and zinc gluconate combined with racecadotril in the treatment of rotavirus enteritis in children

Ji Feifei
Department of Pediatrics, the People’s Hospital of Wenzhou (Wenzhou Women’s and Children’s Hospital), Wenzhou, Zhejiang 325000, China

【Abstract】Objective To explore the clinical effect of lysine hydrochloride and zinc gluconate granules combined with racecadotril in the treatment of rotavirus enteritis in children and its effect on myocardial enzymes. Methods From July 2018 to July 2019, 110 children with rotavirus enteritis in the People’s Hospital of Wenzhou were selected in the research. All the children were divided into control group and study group according to random number table method, with 55 cases in each group. The control group was treated with racecadotril granules, while the study group was treated with lysine hydrochloride and zinc gluconate granules combined with racecadotril granules. The adverse drug reactions were recorded during the treatment. The diarrhea stopping time, fever subsidence time, vomiting stopping time and hospitalization time were recorded. The patients were examined before and after treatment. The levels of serum myocardial enzymes were measured to evaluate the therapeutic effect of rotavirus enteritis in children. Results The diarrhea stopping time, fever subsidence time, vomiting stopping time and hospitalization time in the study group[(2.61 ± 0.69) d, (1.31 ± 0.48) d, (2.17 ± 0.54) d, (4.03 ± 0.82) d] were significantly shorter than those in the control group[(3.84 ± 0.82) d, (2.76 ± 0.63) d, (3.39 ± 0.71) d, (5.42 ± 1.07) d]. The differences were statistically significant(\( t = 6.207, 8.154, 7.316, 5.593 \), all\( P < 0.05 \)). The total effective rate of treatment for rotavirus enteritis in the study group[94.54% (52/55)] was significantly higher than that in the control group[80.00% (44/55)]. The difference was statistically significant(\( \chi^2 = 5.238, P < 0.05 \)). The levels of serum...
CK, CK-MB and LDH in the study group [(35.02 ± 5.36) U/L, (92.83 ± 9.62) U/L, (112.09 ± 12.73) U/L] were significantly lower than those in the control group [(46.54 ± 6.93) U/L, (118.36 ± 10.83) U/L, (118.36 ± 10.83) U/L] after treatment, the differences were statistically significant (t = 7.629, 10.637, 9.592, all P < 0.05). During treatment, the overall incidence of adverse drug reactions such as nausea, abdominal pain, rash and sleepiness between the two groups had no statistically significant difference [9.09% (5/55) vs. 10.91% (6/55), χ² = 0.101, P = 0.751]. Conclusion Compared with racecadotril alone, lysine hydrochloride and zinc gluconate granules combined with racecadotril can effectively shorten the improvement time of clinical symptoms in children with rotavirus enteritis, improve the overall curative effect, reduce the degree of myocardial injury, and does not increase adverse drug reactions, which is worthy of clinical application.

【Key words】Rotavirus infections; Enteritis; Racecadotril; Lysine and zinc gluconate granules; Creatine kinase; Creatine kinase, MB form; Lactate dehydrogenases; Child

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.014
络酸梭菌二联活菌对肺炎合并抗生素相关性腹泻患儿肠道菌群及炎症、免疫指标的影响

雷培瑜1 雷婧2 王洁

1 山西省大同市第六人民医院儿科门诊 037000；2 苏州大学儿科临床医学院 215000；

【摘要】 目的 探讨益生菌对肺炎合并抗生素相关性腹泻新生儿肠道菌群、炎症因子及免疫功能的影响。方法 选取2016年12月至2019年10月大同市第六人民医院诊治的肺炎合并抗生素相关性腹泻新生儿44例为研究对象，根据随机数字表法分为对照组和观察组各22例。在常规对症治疗基础上，对照组采用布拉酵母菌口服治疗，观察组采用络酸梭菌二联活菌散剂治疗，疗程均为2周。比较两组肠道菌群、炎症因子及免疫功能改变情况。结果 治疗前两组白细胞介素2（IL-2）、白细胞介素6（IL-6）和肿瘤坏死因子α（TNF-α）水平差异均无统计学意义（均 P>0.05）；治疗后两组IL-2、IL-6和TNF-α水平均明显改善（均 P<0.05），且观察组IL-2（34.20 ± 8.55）ng/L 比（40.13 ± 10.32）ng/L、IL-6（31.22 ± 5.82）ng/L 比（31.22 ± 5.82）ng/L和TNF-α（30.10 ± 6.20）ng/L 比（43.55 ± 9.52）ng/L 均低于对照组（t = 7.501, 6.885, 8.264, 均 P<0.05）。治疗前两组肠道乳杆菌、双歧杆菌和真杆菌数量差异均无统计学意义（均 P>0.05）；治疗后两组肠道乳杆菌、双歧杆菌和真杆菌数量均明显增高（均 P<0.05），且观察组肠道乳杆菌 [（9.50 ± 0.53）× 10⁸ CFU/mL 比（8.95 ± 0.44）× 10⁸ CFU/mL]、双歧杆菌 [（10.60 ± 0.53）× 10⁸ CFU/mL 比（9.90 ± 0.46）× 10⁸ CFU/mL]和真杆菌 [（8.93 ± 0.68）× 10⁸ CFU/mL 比（8.08 ± 0.40）× 10⁸ CFU/mL] 均高于对照组（t = 5.065, 6.547, 5.116, 均 P<0.05）。治疗前两组CD4⁺、CD8⁺、CD19⁺和CD4⁺/CD8⁺水平差异均无统计学意义（均 P>0.05）；治疗后两组CD4⁺、CD8⁺、CD19⁺和CD4⁺/CD8⁺水平均明显改善（均 P<0.05），且观察组CD4⁺ [（62.55 ± 5.06）% 比（57.12 ± 4.39）%]、CD19⁺ [（40.52 ± 3.52）% 比（36.43 ± 2.55）%] 和CD4⁺/CD8⁺ [（1.78 ± 0.22）比（1.43 ± 0.13）]水平均高于对照组（t = 7.504, 6.958, 5.452, 均 P<0.05），CD4⁺ [（21.22 ± 2.05）% 比（25.44 ± 2.49）%] 低于对照组（t = 5.112, P<0.05）。结论 在新生儿肺炎合并抗生素相关性腹泻的治疗中，络酸梭菌二联活菌能改善患儿肠道菌群，减轻炎性反应，改善免疫功能，效果更好。

【关键词】 腹泻；肺炎；抗菌药；胃肠道；免疫；炎症介导素类；婴儿，新生

DOI:10.3760/cma.j.issn.1008-6706.2020.15.015

Effect of Clostridium perfringens combined with live bacteria therapy on intestinal flora, inflammation and immune indicators in children with pneumonia and antibiotic associated diarrhea

Lei Peiyu1, Lei Jing2, Wang Jie3

1 Department of Pediatric Outpatients, the Sixth People’s Hospital of Datong, Datong, Shanxi 037000, China; 2 School of Pediatric Clinical Medicine, Suzhou University, Suzhou, Jiangsu 215000, China; 3 Department of Infectious Pediatrics, the First People’s Hospital of Datong, Datong, Shanxi 037001, China

【Abstract】Objective  To investigate the effect of Clostridium perfringens combined with live bacteria therapy on intestinal flora, inflammation and immune indicators in children with pneumonia and antibiotic associated diarrhea.

Methods  From December 2016 to October 2019, 44 neonates with pneumonia and antibiotic associated diarrhea were diagnosed and treated in the Sixth People’s Hospital of Datong in the study, and they were divided into control group and observation group according to the random number table method, with 22 cases in each group. On the basis of routine symptomatic treatment, the control group was treated by oral administration of Saccharomyces boulardii, and the observation group was treated with Clostridium perfringens combined with live bacteria powder. The treatment course was two weeks. The intestinal flora, inflammatory factors and immune function of the two groups were compared.

Results  There were no statistically significant differences in the levels of IL-2, IL-6 and TNF-α...
between the two groups before treatment (all \( P > 0.05 \)), and the levels of IL-2, IL-6 and TNF-\( \alpha \) in the two groups after treatment were significantly improved (all \( P < 0.05 \)). The levels of IL-2 [34.20 \pm 8.55 ng/L vs. 40.13 \pm 10.32 ng/L], IL-6 [21.02 \pm 5.66 ng/L vs. 31.25 \pm 7.82 ng/L] and TNF-\( \alpha \) [30.10 \pm 6.20 ng/L vs. 43.55 \pm 9.52 ng/L] in the observation group were significantly lower than those in the control group (\( t = 7.501, 6.885, 8.264, all P < 0.05 \)). There were no statistically significant differences in the number of Lactobacillus, Bifidobacterium and Eubacterium in the two groups before treatment (all \( P > 0.05 \)), and the number of Lactobacillus, Bifidobacterium and Eubacterium in the two groups after treatment increased significantly (all \( P < 0.05 \)). The number of Lactobacillus [9.50 \pm 0.53] \times 10^8 CFU/mL vs. [8.95 \pm 0.44] \times 10^8 CFU/mL], Bifidobacterium [10.60 \pm 0.53] \times 10^8 CFU/mL vs. [9.90 \pm 0.46] \times 10^8 CFU/mL] and Eubacterium [8.93 \pm 0.68] \times 10^8 CFU/mL vs. [8.08 \pm 0.40] \times 10^8 CFU/mL] in the observation group were significantly higher than those in the control group (\( t = 5.065, 6.547, 5.116, all P < 0.05 \)). There were no statistically significant differences in the levels of CD\(_{+3}\), CD\(_{+4}\), CD\(_{+8}\) and CD\(_{+4}/CD_{+8}\) between the two groups before treatment (all \( P > 0.05 \)), and the levels of CD\(_{+3}\), CD\(_{+4}\), CD\(_{+8}\) and CD\(_{+4}/CD_{+8}\) in the two groups after treatment were significantly improved (all \( P < 0.05 \)). The levels of CD\(_{+3}\) [62.55 \pm 5.06] % vs. [57.12 \pm 4.39] %], CD\(_{+4}\) [40.52 \pm 3.52] % vs. [36.43 \pm 2.55] %], CD\(_{+4}/CD_{+8}\) [1.78 \pm 0.22] vs. [1.43 \pm 0.13] in the observation group were significantly higher than those in the control group (\( t = 7.504, 6.958, 5.425, all P < 0.05 \)). The level of CD\(_{+8}\) [21.22 \pm 2.05] % vs. [25.44 \pm 2.49] %] in the observation group was significantly lower than that in the control group (\( t = 5.112, P < 0.05 \)). **Conclusion** Clostridium perfringens combined with live bacteria in the treatment of neonatal pneumonia with antibiotic associated diarrhea can improve intestinal flora, reduce inflammatory response and improve immune function, and the effect is better.

**[Key words]** Diarrhea; Pneumonia; Anti-bacterial agents; Gastrointestinal tract; Immunity; Inflammation mediators; Infant, newborn

DOI:10.3760/cma.j.issn.1008-6706.2020.15.015
地佐辛镇静用于臂丛神经阻滞的效果观察

沈娟萍 罗艳萍 方敏

浙江省桐乡市第二人民医院麻醉科

摘要 目的 观察地佐辛镇静用于臂丛神经阻滞的效果。方法 选取桐乡市第二人民医院2016年1月至2018年12月行臂丛神经阻滞患者80例为观察对象，采用信封法分为对照组40例，观察组40例，对照组患者未实施镇静干预，观察组患者接受地佐辛镇静。比较两组患者不同时间点心率、平均动脉压、血氧饱和度及Ramsay评分，分析两组患者的麻醉效果。结果 观察组感觉阻滞起效时间\((8.86 \pm 0.92)\) min明显短于对照组\((11.43 \pm 1.08)\) min\((t = 11.457, P < 0.05)\)，感觉阻滞持续时间\((729.95 \pm 54.43)\) min、镇痛持续时间\((879.96 \pm 165.52)\) min均明显长于对照组\((600.73 \pm 49.86)\) min、\((750.27 \pm 261.19)\) min\((t = 11.072, 2.653, P < 0.05)\)。两组手术开始前平均动脉压、心率及各时间点血氧饱和均无统计学意义（均\(P > 0.05)\)。两组手术开始前 Ramsay评分差异无统计学意义（均\(P > 0.05)\)。观察组手术\(15\) min、手术\(30\) min、手术结束时平均动脉压和心率均明显低于对照组（均\(P < 0.05)\)。两组手术开始前 Ramsay评分差异无统计学意义（均\(P > 0.05)\），观察组手术\(15\) min、手术\(30\) min 及手术结束时Ramsay评分分别为\((4.08 \pm 0.54)\)分、\((4.15 \pm 0.37)\)分、\((2.96 \pm 0.19)\)分，均明显高于对照组的\((1.79 \pm 0.27)\)分、\((1.77 \pm 0.16)\)分、\((1.93 \pm 0.14)\)分，差异均有统计学意义（\(t = 23.989, 37.341, 27.602, P < 0.05)\)。结论 地佐辛镇静用于臂丛神经阻滞，患者生命体征波动幅度小，镇静效果明显。

关键词 麻醉和镇痛；麻醉，局部；地佐辛；心率；动脉压；血氧监测；经皮

基金项目：浙江省中医药科技计划项目（2019ZA124）

DOI:10.3760/cma.j.issn.1008-6706.2020.15.016

Observation of the effect of dizocine sedation on brachial plexus nerve block

Shen Juanping, Luo Yanping, Fang Min

Department of Anesthesiology, the Second People’s Hospital of Tongxiang, Tongxiang, Zhejiang 314511, China

Abstract Objective To observe the application value of dizocine sedation in brachial plexus nerve block. Methods From January 2016 to December 2018, 80 patients with brachial plexus block anesthesia in the Second People’s Hospital of Tongxiang were selected and divided into two groups according to the random number table method, with 40 cases in each group. The control group was not given sedation intervention, while the observation group was given dizocine sedation. The heart rate, mean arterial pressure, blood oxygen saturation and Ramsay scores at different time points were compared between the two groups. The anesthetic effect of the two groups was analyzed. Results The onset time of sensory block in the observation group\((8.86 \pm 0.92)\) min was significantly shorter than that in the control group\((11.43 \pm 1.08)\) min\((t = 11.457, P < 0.05)\). The duration of sensory block\((729.95 \pm 54.43)\) min and the duration of analgesia\((879.96 \pm 165.52)\) min in the observation group were significantly longer than those in the control group\((600.73 \pm 49.86)\) min\((750.27 \pm 261.19)\) min\((t = 11.072, 2.653, all P < 0.05)\). There were no statistically significant differences in the mean arterial pressure, heart rate and blood oxygen saturation at each time point between the two groups before operation \((all P > 0.05)\). The mean arterial pressure and heart rate of the observation group were significantly lower than those of the control group at \(15\) min, \(30\) min after operation and at the end of operation \((all P < 0.05)\). The Ramsay score between the two groups had no statistically significant difference before operation \((P > 0.05)\). At \(15\) min, \(30\) min after operation and at the end of surgery, the Ramsay scores of the observation group were \((4.08 \pm 0.54)\) points, \((4.15 \pm 0.37)\) points, \((2.96 \pm 0.19)\) points, respectively, which were significantly higher than those of the control group \([(1.79 \pm 0.27)\) points, \((1.77 \pm 0.16)\) points, \((1.93 \pm 0.14)\) points], the differences were statistically significant \((t = 23.989, 37.341, 27.602, all P < 0.05)\). Conclusion After dizocine sedation is used in brachial plexus block patients, the vital signs fluctuate slightly and the sedation effect is obvious.

Key words Anesthesia and analgesia; Anesthesia, local; Dizocine; Heart rate; Arterial pressure; Blood gas monitoring, transcutaneous

Fund program: Science and Technology Planning Project of Traditional Chinese Medicine of Zhejiang Province (2019ZA124)

DOI:10.3760/cma.j.issn.1008-6706.2020.15.016
米氮平联合度洛西汀治疗抑郁症伴失眠的效果观察

王鹭\(^1\) 张迪\(^2\) 曹峰\(^1\)

\(^1\)浙江省,绍兴市第七人民医院康复病区 312000; \(^2\)浙江省,绍兴市第七人民医院心身三科 312000

【摘要】目的 观察米氮平联合度洛西汀治疗老年人抑郁症伴失眠的临床效果。方法 选取绍兴市第七人民医院 2017 年 6 月至 2018 年 8 月收治的老年抑郁症伴失眠患者 82 例为观察对象, 采用双色球摇号方式将患者分为对照组 41 例, 观察组 41 例。观察组采用米氮平联合度洛西汀治疗, 对照组采用度洛西汀治疗, 两组均治疗 6 周为 1 个疗程。比较两组不同时间段抑郁评分、睡眠质量评分及不良反应发生情况。结果 治疗后 2 周, 4 周, 6 周, 观察组抑郁评分分别为 (18.02 ± 1.32), (11.02 ± 1.12), (6.20 ± 1.04), 均低于对照组的 (20.69 ± 1.85), (12.96 ± 1.55), (7.89 ± 1.15). 两组差异均有统计学意义 (t = 7.523, 6.496, 6.979, 均P < 0.05). 观察组匹茨堡睡眠质量指数量表评分分别为 (7.55 ± 1.02), (6.22 ± 1.01), (5.22 ± 1.01), 均低于对照组的 (12.65 ± 1.82), (9.89 ± 1.67), (8.64 ± 1.54). 两组差异均有统计学意义 (t = 15.652, 12.041, 11.891, 均P < 0.05). 观察组不良反应发生率为 2.44% (1/40), 低于对照组的 24.39% (10/40). 结论 米氮平联合度洛西汀治疗老年抑郁症伴失眠患者的临床效果显著, 能够显著改善患者睡眠障碍, 缓解抑郁症状。

【关键词】抑郁症; 入睡和睡眠障碍; 米氮平; 度洛西汀; 药物疗法; 联合; 老年人; 临床对照试验

基金项目:浙江省绍兴市科技计划项目(2015B70051)

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.017

【Abstract】Objective To observe the clinical effect of mirtazapine combined with duloxetine in the treatment of depression complicated with insomnia. Methods From June 2017 to August 2018, 82 patients with depression and insomnia were selected from the Seventh People's Hospital of Shaoxing. The patients were divided into the control group (41 cases) and the observation group (41 cases) by double color ball wagging method. The observation group was treated with mirtazapine in combination with duloxetine, and the control group was treated with duloxetine. Both two groups were treated for 6 weeks as a course of treatment. The scores of depression, sleep quality and the occurrence of adverse reactions were compared between the two groups. Results At 2, 4 and 6 weeks after treatment, the depression scores of the observation group were (18.02 ± 1.32), (11.02 ± 1.12), (6.20 ± 1.04), respectively, which were lower than those of the control group [(20.69 ± 1.85), (12.96 ± 1.55), (7.89 ± 1.15)]. The differences between the two groups were statistically significant (t = 7.523, 6.496 and 6.979, all P < 0.05). The scores of the Pittsburgh sleep quality index scale in the observation group were (7.55 ± 1.02), (6.22 ± 1.01) and (5.22 ± 1.01), respectively, which were lower than those in the control group [(12.65 ± 1.82), (9.89 ± 1.67) and (8.64 ± 1.54)]. The differences between the two groups were statistically significant (t = 15.652, 12.041 and 11.891, all P < 0.05). The incidence of adverse reactions in the observation group was 2.44% (1/40), which was lower than that in the control group [24.39% (10/40)]. The difference was statistically significant (χ² = 8.505, P < 0.05). Conclusion The clinical effect of mirtazapine combined with duloxetine in the treatment of depression with insomnia is remarkable, which can significantly improve the sleep disorder and alleviate the depressive symptoms.

【Key words】Depressive disorder; Sleep initiation and maintenance disorders; Mirtazapine; Duloxetine; Drug therapy, combination; Aged; Controlled clinical trial

Fund program: Science and Technology Planning Project of Shaoxing City, Zhejiang Province (2015B70051)

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.017
中孕期胎儿超声软指标阳性的临床意义分析

张劲元
安徽省庐江县人民医院超声诊断科 231500

【摘要】 目的 探讨中孕期胎儿超声软指标阳性的临床意义。方法 选取庐江县人民医院 2019 年 2 - 11月行产前超声检查的中孕期孕妇 486 例的临床资料，对产检超声检查提示阳性的 209 例共 244 项单项阳性指标进行回顾性分析。结果 486 例孕妇中检出阳性指标 209 例，阳性率 43.0% (486/209)。阳性单项 244 项中，胎儿畸形或缺陷 10 项，占 4.10%；胎儿附属物阳性 106 项，占 43.44%；胎儿软指标阳性 128 项，占 52.46%。结论 产前超声检查提示阳性中，超声软指标占大多数，运用超声软指标预测胎儿染色体风险，不宜过度解读，防止导致孕妇和近亲属恐慌，选择有创性产前诊断技术，造成检查过度，在一些基层医疗机构甚至采取人工终止妊娠，给母胎带来不必要的伤害。

【关键词】 超声检查； 产前； 产前保健； 产前诊断； 孕妇； 妊娠中期； 胚胎结构； 先天畸形； 染色体

 DOI: 10.3760/cma.j.issn.1008-6706.2020.15.018

Analysis of the clinical significance of fetal ultrasound soft index positive in middle pregnancy

Zhang Jinyuan
Department of Ultrasound Diagnosis, the People’s Hospital of Lujiang County, Anhui 231500, China

【Abstract】 Objective To explore the clinical significance of fetal ultrasound soft index positive in middle pregnancy. Methods The clinical data of 486 pregnant women who were examined by prenatal ultrasound from February 2019 to November 2019 in the People’s Hospital of Lujiang County were collected, and a retrospective analysis was made in 244 single positive indicator in 209 pregnant women who were positive by prenatal ultrasound. Results Among 486 pregnant women, 209 cases were positive, with a positive rate of 43.0% (486/209). Among 244 positive items, 10 items were fetal malformation or defect, accounting for 4.10% ; 106 items were fetal appendage, accounting for 43.44% ; 128 items were fetal soft index, accounting for 52.46%. Conclusion The soft index of ultrasound is the majority of the positive results in prenatal ultrasound examination. It is not suitable to over interpret the soft index of ultrasound to predict the risk of fetal chromosome, so as to prevent the panic of pregnant women and their families. The invasive prenatal diagnosis technology is chosen to cause over examination, and even to terminate pregnancy manually in some basic medical institutions, which will bring unnecessary harm to the mother and fetus.

【Key words】 Ultrasonography； Prenatal； Prenatal care； Prenatal diagnosis； Pregnant women； Mid pregnancy； Embryo structure； Congenital malformation； Chromosome

 DOI: 10.3760/cma.j.issn.1008-6706.2020.15.018
不同浓度罗哌卡因骶管阻滞对腹股沟斜疝患儿术后疼痛的影响

陈友勇 王树桂 吕露 徐扬
江苏省扬州市妇幼保健院麻醉科 225002
通信作者: 徐扬, Email: yzluzj@sina.com, 电话: 0514-87933276

【摘要】目的 观察不同浓度罗哌卡因用于骶管阻滞（骶麻）对学龄前腹股沟斜疝患儿术后疼痛的影响。方法 选取2015年5月至2018年8月扬州市妇幼保健院收治的学龄前腹股沟斜疝患儿80例,采用随机数字表法将患儿分为L组(0.25%罗哌卡因组)和H组(0.375%罗哌卡因组),每组40例。两组患儿麻醉使用相同的静脉诱导,麻醉深度足够后置入喉罩,保留自主呼吸,吸入七氟醚维持麻醉。患儿喉罩置入成功后取左侧卧位行骶麻。L组患儿给予0.25%罗哌卡因,H组患儿给予0.375%罗哌卡因。全程观察两组患儿术中生命体征,观察记录两组患儿麻醉成功率、苏醒时间,术后2、4、6、8h疼痛评分,运动阻滞恢复时间(运动阻滞恢复到Bromage0级时间)以及术中、术后不良反应发生情况。结果 两组患儿麻醉总成功率、苏醒时间差异均无统计学意义(均P>0.05);术后L组患儿运动阻滞恢复时间[(105.5±19.6)min]明显短于H组[(152.6±21.5)min],差异有统计学意义(t=7.356,P<0.05);术后2、4、6、8h两组患儿疼痛评分差异均无统计学意义(P>0.05),术后4、6h H组患儿疼痛评分[(1.5±1.0)分、(2.7±0.9)分]均明显低于L组[(2.8±0.9)分、(3.5±0.7)分],差异均有统计学意义(t=2.317,2.537,均P<0.05);两组患儿术后不良反应发生率差异无统计学意义(P>0.05)。结论 对学龄前腹股沟斜疝囊高位结扎术患儿骶麻使用0.25%、0.375%两种浓度罗哌卡因均安全有效,0.375%罗哌卡因行骶麻相比0.25%罗哌卡因在术后镇痛方面更具有优势。

【关键词】 喉罩; 罗哌卡因; 七氟醚; 麻醉; 髓管阻滞; 学龄前儿童; 腹股沟斜疝; 术后疼痛

Comparison of efficacy of different concentration of ropivacaine sacral block on postoperative pain in preschool children with oblique inguinal hernia
Chen Youyong, Wang Shugui, Lyu Lu, Xu Yang
Department of Anesthesiology, the Maternal and Child Health Hospital of Yangzhou, Yangzhou, Jiangsu 225002, China
Corresponding author: Xu Yang, Email: yzluzj@sina.com, Tel: 0514-87933276
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.019
肌电生物反馈配合康复健康教育治疗脑卒中偏瘫患者的
effect观察及其对活动能力的影响

吴琼洁1 胡文初2 姜波1
1浙江省,舟山市中医院康复科 316000; 2浙江省,舟山市定海区中心医院康复科 316000

【摘要】目的 评价肌电生物反馈 (EMG-BF) 配合康复健康教育治疗脑卒中偏瘫的效果及其对患者活动能力的影响。方法选取舟山市中医院 2016 年 1 月至 2018 年 6 月收治的脑卒中偏瘫患者 114 例,采用随机数字表法分为对照组和观察组各 57 例。两组均予以常规康复治疗,对照组在此基础上加用 EMG-BF 疗法,观察组在对照组基础上配合康复健康教育。评价两组的治疗效果、日常生活能力、活动能力等指标。结果治疗后,对照组巴氏指数、上肢 Fugl-Meyer 运动功能评分法 (FMA) 评分、下肢 FMA 评分均显著高于对照组 (t = 4.306, 4.443, 4.967, 均 P < 0.05), 而抑郁自评量表评分和改良 Ashworth 量表评级均明显低于对照组 (t = 7.468, χ2 = 9.459, 均 P < 0.05)。观察组治疗总有效率为 87.72% (50/57), 显著高于对照组的 71.93% (41/57), 差异有统计学意义 (χ2 = 4.412, P < 0.05)。结论 EMG-BF 配合康复健康教育治疗能够显著改善脑卒中偏瘫患者肢体运动功能和日常生活能力, 缓解抑郁情绪, 提高治疗效果。

【关键词】卒中; 偏瘫; 电刺激疗法; 康复; 健康教育; 日常生活活动

Effect of EMG biofeedback combined with rehabilitation health education in the treatment of stroke patients with hemiplegia and its influence on activity

Wu Qiongjie1, Hu Wenchu2, Jiang Bo1
1 Department of Rehabilitation, the Traditional Chinese Medicine Hospital of Zhoushan, Zhoushan, Zhejiang 316000, China; 2 Department of Rehabilitation, the Central Hospital of Dinghai District, Zhoushan, Zhejiang 316000, China

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.020
Tei指数评估慢性阻塞性肺疾病患者右心功能
并预测脱机拔管的临床研究

沈启 包松雄 胡玉平
宁波市第九医院重症医学科 315000

【摘要】目的探讨心脏Tei指数对慢性阻塞性肺疾病(COPD)患者右心功能的评估价值，并通过检测血浆脑钠肽(BNP)含量，探寻合适的脱机拔管时机。方法采取病例对照研究，选择宁波市第九医院2018年1-6月住院治疗的COPD患者92例为研究对象(其中伴严重呼吸困难需要气管插管患者43例)，按有无合并右心衰竭分为有右心衰组(A组)48例和非右心衰组(B组)44例；另选择健康体检者45例为健康对照组。采用超声心动图测量三组心脏Tei指数，比较治疗前后COPD患者心脏Tei指数的变化；观察COPD患者机械通气时间和机械通气时血浆BNP浓度(BNP1)、机械通气第3天的血浆BNP浓度(BNP2)，并计算两者差值(BNP3)，根据COPD急性加重患者的机械通气指南区分脱机成功和脱机失败组，绘制ROC曲线，分析拔管时机。

结果治疗后，两组COPD心脏Tei指数[(0.62±0.13)、(0.47±0.08)]均较治疗前[(0.91±0.06)、(0.75±0.16)]下降(非右心衰组；t=9.26，右心衰组；t=8.33，均P<0.01)。拔管成功组与失败组血浆BNP显著高于BNP1明显高于BNP2[拔管成功组；(532.5±21.4)ng/L，(254.3±19.6)ng/L，t=5.37，P<0.05]；拔管失败组；(721.2±26.2)ng/L，(458.2±41.4)ng/L，t=6.32，P<0.05]；BNP为327 ng/L时，预测拔管成功的灵敏度为97%(46/47)，特异度为51%(12/23)。结论检测心脏Tei指数可早期评估COPD患者右心功能情况，实时掌控疗效及预测预后；机械通气时BNP与拔管第3天BNP水平及其差值可有效预测COPD患者脱机拔管时机。

【关键词】肺疾病；慢性阻塞性；Tei指数；心室功能；右；利钠肽；脑；预测；脱机；拔管

基金项目：浙江省宁波市第九医院科技攻关项目(2018A06)

Clinical value of Tei index in evaluation of right ventricular function in patients with chronic obstructive pulmonary disease and prediction of offline extubation

Shen Qi, Bao Songxiong, Hu Yuping
Department of Critical Care Medicine, the Ninth Hospital of Ningbo, Ningbo, Zhejiang 315000, China

Fund program: Key Science and Technology Research Project of the Ninth Hospital of Ningbo, Zhejiang Province(2018A06)

DOI:10.3760/cma.j.issn.1008-6706.2020.15.021
理气和胃方加减联合针刺、穴位贴敷治疗消化道肿瘤的效果观察

李京波 胡善杰
山东省莒县中医医院肿瘤二科 276500

【摘要】目的 探讨理气和胃方加减联合针刺、中药穴位贴敷治疗消化道肿瘤的临床效果。方法 选取莒县中医医院2017年6月至2018年6月收治的消化道肿瘤患者100例为研究对象，采用随机数字表法分为观察组50例、对照组50例。对照组采用常规治疗，观察组采用理气和胃方加减联合针刺、中药穴位贴敷治疗。比较两组中医证候积分、总有效率、不良反应、胃液引流量。结果 观察组总有效率为96.0%（48/50）、第7天中医证候积分（2.39±1.12）分，第21天中医证候积分（0.52±0.08）分，不良反应发生率为4.0%（2/50），第7天胃液引流量（186.25±17.95）mL，第21天胃液引流量（58.65±3.22）mL，均优于对照组的68.0%（34/50）、（3.86±1.34）分，（1.63±0.43）分，34.0%（17/50）、（298.66±28.73）mL，（121.08±8.95）mL（χ²=12.458，t=1.865，2.124，χ²=14.856，t=65.854，52.312，均P<0.05）。结论 理气和胃方加减联合针刺、中药穴位贴敷治疗消化道肿瘤的临床效果优于常规治疗。

【关键词】消化系统肿瘤；理气和胃方；中草药；针刺穴位；敷贴；中医证候积分；胃液；药物疗法；不良反应

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.022

Observation on the effect of Liqi Hewei recipe plus or minus combined with acupuncture and acupoint therapy in the treatment of digestive tract tumors

Li Jingbo, Hu Shanjie
Department of Oncology, Juxian Hospital of Traditional Chinese Medicine, Shandong 276500, China

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.022
分层次理念下自制微课教学法在麻醉专业住院医师规培中的效果分析

习建华1, 程远1, 孙建良1, 罗贤哲1, 俞婷2, 金芊芊1
1浙江大学医学院附属杭州市第一人民医院麻醉科 310006; 2浙江大学医学院附属杭州市第一人民医院信息科 310006

【摘要】目的探讨基于分层次理念的学员自制微课教学法在麻醉专业住院医师规范化培训中的应用效果。方法选取2017年3月至2018年3月在浙江大学医学院附属杭州市第一人民医院接受规范化培训的麻醉专业住院医师38名为对照组，采用传统教学模式；另选取2018年6月至2019年6月接受规范化培训的麻醉专业住院医师34名为观察组，采用基于分层次理念的学员自制微课教学法。观察两组教学效果、学员综合能力及学员对教学的满意度。结果观察组学员理论考试、操作考试得分及总得分分别为（47.52±4.79）分、（43.69±4.82）分、（91.25±4.59）分，均高于对照组的（43.85±4.72）分、（40.01±4.58）分、（84.92±4.63）分，差异均有统计学意义（t=3.271、3.321、5.815，均P<0.05）；带教老师对观察组学员实践操作能力、交流沟通能力、团队协作能力、自主学习能力、临床适应能力评分分别为（8.42±0.75）分、（8.35±0.72）分、（8.51±0.74）分、（9.14±0.51）分、（8.91±0.78）分，均高于对照组的（7.71±0.68）分、（8.35±0.72）分、（8.51±0.74）分、（9.14±0.51）分、（8.91±0.78）分，差异均有统计学意义（t=4.213、4.398、5.114、3.913、4.154，均P<0.05）；观察组学员对教学满意率为97.06%（33/34），高于对照组的81.58%（31/38），差异有统计学意义（χ²=4.354，P<0.05）。结论在麻醉专业住院医师规范化培训中应用基于分层次理念的学员自制微课教学法，可显著提升教学质量，增强学员综合能力，提高学员满意度。

【关键词】麻醉；实习医师和住院医师职务；基于问题的学习；教育，专业，再培训；课程；教育影片和视频

基金项目：浙江中医药大学教育教学改革研究项目（YB18015）
DOI:10.3760/cma.j.issn.1008-6706.2020.15.023

Application effect of self – made micro – teaching method based on hierarchical concept in the standardized residents training of anesthesia specialty

Xi Jianhua¹, Cheng Yuan¹, Sun Jianliang¹, Luo Xianzhe¹, Yu Ting², Jin Qianqian¹
¹Department of Anesthesiology, the First People's Hospital of Hangzhou Affiliated to Medical School of Zhejiang University, Hangzhou, Zhejiang 310006, China; ²Department of Information, the First People's Hospital of Hangzhou Affiliated to Medical School of Zhejiang University, Hangzhou, Zhejiang 310006, China

Fund program: Research Project on Education and Teaching Reform of Zhejiang University of Traditional Chinese Medicine (YB18015)
DOI:10.3760/cma.j.issn.1008-6706.2020.15.023
新形势下临床路径实施的困难及对策
罗瑶
四川省,宜宾市第一人民医院医务科 644000

【摘要】在医院高质量发展的形势下,通过对宜宾市第一人民医院临床路径现状分析,发现存在经济学作用未完全发挥、无统一表单及软件不能满足加速康复外科、中心工作、医联体工作需求等问题。根据国内外研究结果,提出完善付费制度、加快软件研发,贯穿于院前、院间、院后完整的诊疗服务过程,以行政区域为单位,统一临床路径表单等建议,促进临床路径的全面实施。

【关键词】临床路径；质量控制；全面质量管理；经济学,医院；软件；医联体；付费制度；

基金项目:四川省基层卫生事业发展研究中心项目(SWFZ18-Y-32)
DOI:10.3760/cma.j.issn.1008-6706.2020.15.024

Study on the difficulties and countermeasures of clinical pathway implementation in the new situation
Luo Yao
Medical Department, the First People's Hospital of Yibin, Yibin, Sichuan 644000, China

Fund program, Sichuan Basic Health Development Research Center (SWFZ18-Y-32)
DOI:10.3760/cma.j.issn.1008-6706.2020.15.024
健康教育路径结合“317 护”在儿科临床特殊检查中的应用

杨丽平1 何朗朗1 徐景霞1 章赛春2
1 杭州市儿童医院内一科 310014；2 杭州市儿童医院护理部 310014

通信作者：徐景霞，Email：45331950@qq.com，电话：0571-85465415

【摘要】 目的 探讨健康教育路径结合“317 护”在儿科临床特殊检查中的应用效果。方法 选取杭州市儿童医院 2016 年 9 月至 2017 年 8 月行 CT、心脏彩超、腰椎穿刺等特殊检查的住院患儿 240 例为研究对象，根据入院时间分为对照组 120 例，观察组 120 例。对照组采用传统方法及自制的宣教单进行健康宣教，观察组采用健康教育路径结合“317 护”并强化口头宣教的方法进行健康宣教。观察两组患儿近亲属相关知识知晓率、患儿检查成功率、近亲属满意度。结果 观察组近亲属相关知识知晓率、患儿检查成功率、近亲属满意度分别为 96.7%（116/120）、95.8%（115/120）、98.3%（118/120），均显著高于对照组的 80.0%（96/120）、85.0%（102/120）、75.0%（90/120），两组差异均有统计学意义（χ² = 16.173、8.127、28.269，均 P < 0.05）。结论 采用健康教育路径结合“317 护”并强化口头宣教在儿科临床特殊检查中的应用效果显著，优于传统健康教育方法。

【关键词】 健康教育；护理；临床路径；体层摄影术，X 线；超声检查；脊椎穿刺；病人满意度

基金项目：浙江省杭州市卫生计生科技计划项目（2016A57）

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.025

Application of health education path combined with 317 Nursing in pediatric clinical special examination

Yang Liping1, He Langlang1, Xu Jingxia1, Zhang Saichun2
1 Department of Internal Medicine, Hangzhou Children’s Hospital, Hangzhou, Zhejiang 310014, China; 2 Department of Nursing, Hangzhou Children’s Hospital, Hangzhou, Zhejiang 310014, China

Corresponding author: Xu Jingxia, Email:45331950@qq.com, Tel:0571-85465415

Fund program: Health and Family Planning Science and Technology Planning Project of Hangzhou City, Zhejiang Province (2016A57)

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.025
戴明环管理对肠造口患者生活质量的影响

邵芬娣 娄海飞 邹丽芳 梅慧飞
浙江省舟山医院外科 316021
通信作者：娄海飞，Email：13750720125@163.com，电话：0580-2292508

【摘要】目的 探讨戴明环（PDCA循环）管理对肠造口患者生活质量的影响，为患者的临床治疗、护理提供参考。方法 选取舟山医院胃肠外科2014年4月至2019年8月收治的结直肠癌行肠造口手术患者62例为观察对象，患者在入院后应用PDCA循环管理进行护理，采用SF-36健康调查量表评估患者护理前后生活质量评分的变化。结果 PDCA循环管理后，患者的生理功能评分为（84.5±11.3）分、躯体疼痛评分为（86.2±18.4）分、活力评分为（79.8±17.2）分、社会功能评分为（82.8±21.1）分、情感职能评分为（84.3±30.1）分，明显高于管理前的（79.3±12.5）分、（76.8±17.3）分、（64.5±19.4）分、（71.3±22.7）分、（70.5±31.7）分，差异均有统计学意义（t=2.429,2.930,4.646,2.921,2.485,均P<0.05）；PDCA循环管理前后，一般健康状况评分、精神健康评分差异均无统计学意义（均P>0.05）。结论 PDCA循环管理能明显提高肠造口患者的生活质量，值得在临床护理中推广应用。

【关键词】肠造口术；结直肠肿瘤；病人医护管理；模型，组织管理；PDCA循环；生活质量；护理；护理管理研究

基金项目：浙江省舟山市科技计划项目（2017C31105）
DOI:10.3760/cma.j.issn.1008-6706.2020.15.026

Influence of daiminghuan management on the quality of life and prognosis of patients with enterostomy

Shao Fendi,Lou Haifei,Zou Lifang,Mei Huifei
Department of Surgery,Zhoushan Hospital,Zhoushan,Zhejiang 316021,China
Corresponding author:Lou Haifei,Email:13750720125@163.com,Tel:0580-2292508

Fund program:Science and Technology Plan Project of Zhoushan City,Zhejiang Province (2017C31105)
DOI:10.3760/cma.j.issn.1008-6706.2020.15.026
“知信行”模式联合动机式访谈在持续性非卧床腹膜透析患者中的应用及效果

王淑颖
浙江省，丽水市人民医院肾内科 323000

【摘要】目的 分析“知信行”模式联合动机式访谈在持续性非卧床腹膜透析(CAPD)患者中的应用及效果。方法 选取丽水市人民医院2018年1~12月建档进行CAPD的患者120例，按照随机数字表法分为对照组60例，观察组60例，对照组给予常规护理及动机式访谈，观察组在对照组基础上联合“知信行”模式进行干预。比较两组干预6个月的容量管理状况及透析充分性。结果 干预6个月，观察组液体摄入、食盐摄入量分别为(716.84±127.45) mL、(3.79±1.08) g，均明显少于对照组的(803.01±143.78) mL、(4.34±1.32) g，差异均有统计学意义(t=3.474, 2.498, P<0.05)；两组随着透析时间的延长，尿量逐渐减少，但干预6个月，观察组尿量明显多于对照组，差异有统计学意义(t=2.199, P<0.05)。干预6个月，观察组水肿程度明显轻于对照组，差异有统计学意义(Z=2.831, P<0.05)。干预6个月，观察组尿素氮、肌酐分别为(16.19±4.62) mmol/L、(502.01±226.61) μmol/L，均低于对照组的(19.50±4.77) mmol/L、(599.65±266.63) μmol/L，差异均有统计学意义(t=3.861, 2.161, P<0.05)。结论 “知信行”模式联合动机式访谈对CAPD患者控制水盐摄入的效果十分明显，且可明显改善患者的水肿程度及尿素氮、肌酐指标。

【关键词】腹膜透析，持续不卧床；健康知识，态度，实践；信念；行为；健康教育；护理；护理实践模式

基金项目：浙江省医药卫生科技计划项目（2017KY801）
DOI:10.3760/cma.j.issn.1008-6706.2020.15.027

Application and effect of "informed letter" mode combined with motivational interview method in CAPD patients

Wang Shuying

Department of Nephrology, the People's Hospital of Lishui, Lishui, Zhejiang 323000, China

Fund program: Medical and Health Science and Technology Plan Project of Zhejiang Province (2017KY801)

DOI:10.3760/cma.j.issn.1008-6706.2020.15.027
【摘要】目的 分析体温监测与管理干预策略用于骨科手术患者的效果。方法 选取温州市人民医院2015年10月至2018年8月收治的骨科手术患者102例，采用随机数字表法分为观察组51例、对照组51例。对照组进行传统干预，观察组在对照组的基础上开展体温监测与管理干预策略。比较两组患者手术前后体温、心率、血压的变化及低体温和寒战发生率；比较两组患者睁眼时间、拔管时间、疼痛程度及切口感染发生情况。结果 观察组术中、术后体温分别为(36.42±3.27)℃、(36.40±3.22)℃，均高于对照组的(35.71±3.10)℃、(35.84±3.18)℃(t=15.274,13.088,均P<0.05)。两组术中心率、收缩压、舒张压差异均有统计学意义(均P<0.05)。观察组低体温、寒战发生率分别为45.1%(23/51)、17.3%(13/51)，均低于对照组的64.7%(33/51)、39.2%(20/51)，差异均有统计学意义(χ²=3.960,5.830,均P<0.05)。观察组睁眼时间、拔管时间分别为(14.8±2.2)min、(24.7±4.2)min，均短于对照组的(21.9±2.9)min、(32.9±4.9)min(t=17.874,16.960,均P<0.05)。观察组术后疼痛程度轻于对照组，差异有统计学意义(χ²=7.786,P<0.05)。观察组术后切口感染发生率为5.9%(3/51)，低于对照组的19.6%(10/51)，差异有统计学意义(χ²=4.320,P<0.05)。结论 骨科手术患者实施体温监测与管理干预策略，能保证患者在术中和术后的体温处于相对平稳状态，且能减少低体温、寒战事件及手术切口感染发生率。

【关键词】体温；监测；生理学；管理；围手术期医护；心率；血压；伤口感染；疼痛程度；寒战

基金项目：浙江省温州市基础性科研项目(Y20180339)
DOI:10.3760/cma.j.issn.1008-6706.2020.15.028

Application of temperature monitoring and management intervention strategy in patients undergoing orthopaedic surgery

Zhou Peimin, Zheng Shu, Huang Zhihong

Department of Orthopaedics, People’s Hospital of Wenzhou, Wenzhou, Zhejiang 325000, China

Fund program: Basic Scientific Research Projects in Wenzhou City, Zhejiang Province(Y20180339)

DOI:10.3760/cma.j.issn.1008-6706.2020.15.028
广东省广州市花都区人民医院医联体护士
对压力性损伤护理知信行的调查

凌晨1 骆谏英2 邝紫桥3
1广州市花都区人民医院肾病学科 510800；2广州市花都区人民医院护理部 510800；
3广州市花都区人民医院乳腺外科 510800
通信作者：骆谏英，Email：blessinglc@163.com，电话：020-62935408

【摘要】目的 了解广州市花都区人民医院医联体下辖单位内护士对压力性损伤护理知信行状况。
方法 于2018年2月采用便利抽样法选取广州市花都区人民医院医联体内护士150名，采用压力性损伤护理知信行量表进行调查。采用SPSS 24.0软件进行统计分析。结果 广州市花都区人民医院医联体护士压力性损伤知识总分为（125.59±24.19）分，为良好；态度总分为（42.93±3.85）分，护士对压力性损伤护理持有正性态度；行为总分（57.27±6.10）分，护士对压力性损伤护理为正性行为。单因素分析中，职称越高、工龄越长，有过压力性损伤护理经验的护士，知识得分越高（F = 3.086，P = 0.029；F = 4.529，P = 0.005；t = 3.005，P = 0.003）。接受过压力性损伤相关培训的护士在知识、态度得分上更高（t = 3.567，P = 0.018；t = -0.17，P = 0.01）。结论 广州市花都区人民医院医联体护士对压力性损伤护理知信行总体得分虽处于良好水平，但护士对更新的理论及实践知识掌握不够，加强对基层医院医联体内护士的压力性损伤知识、技能培训势在必行。

【关键词】医院，区，医院，社区；卫生保健联合体；压力性损伤护理；护士；知识；态度；行为；问卷调查

基金项目：广东省广州市花都区科技计划项目（18-HDWS-013）
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.029

Investigation of pressure ulcer care knowledge, attitude, behaviour among nurses in primary hospital medical association of Guangzhou city, Guangdong province
Ling Chen1, Luo Jianying2, Kuang Ziqiao3
1Department of Nephrology, People’s Hospital of Huadu District, Guangzhou, Guangdong 510800, China；2Department of Nursing, People’s Hospital of Huadu District, Guangzhou, Guangdong 510800, China；3Department of Breast Surgery, People’s Hospital of Huadu District, Guangzhou, Guangdong 510800, China

Corresponding author: Luo Jianying, Email: blessinglc@163.com, Tel: 020-62935408

Fund program: Huadu District Science and Technology Program, Guangzhou City, Guangdong Province (18-HDWS-013)
DOI: 10.3760/cma.j.issn.1008-6706.2020.15.029
安宁照护用于肿瘤临终患者的满意度调查

於蓓 李剑萍 俞晓利
浙江省, 舟山市普陀区人民医院护理部 316100

【摘要】 目的 探讨安宁照护在肿瘤临终患者中的满意度。方法 选取 2016 – 2018 年入住舟山市普陀区人民医院肿瘤病区的肿瘤临终患者 157 例,根据自愿原则,分成两组,愿意入选的 96 例患者为安宁照护组,不愿意入选的 61 例患者为常规对照组。安宁照护组患者用科学的心理关怀方法、精湛的临床护理手段、姑息支持疗法和针对性的营养指导实施安宁照护;常规对照组采用常规的临床治疗和护理手段。对该 157 例临终患者及/或近亲属均发放自制的《病人(或家属)满意度调查表》,调查满意度。结果 安宁照护组总体满意率(95.8%)明显高于常规对照组(84.2%),两组差异有统计学意义(Z = 3.849, P < 0.0001)。并且安宁照护组普遍反映患者生存质量提高,能内心平静地面对死亡。结论 安宁照护大大提高了临终患者及/或近亲属的满意度,值得在临床中推广。

【关键词】 安宁照护; 临终患者; 满意度调查; 生存质量; 心理关怀; 宣教; 疼痛管理; 护理; 社会支持

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.030

Effect of hospice care on the satisfaction of end – of – life cancer patients

Yu Bei, Li Jianping, Yu Xiaoli
Department of Nursing, People’s Hospital of Putuo District, Zhoushan, Zhejiang 316100, China

DOI: 10.3760/cma.j.issn.1008-6706.2020.15.030
急性 ST 段抬高型心肌梗死患者中微循环阻力指数相关性的研究进展

周健伟 张晶 何胜虎
扬州大学附属苏北人民医院心血管内科  225000
通信作者：何胜虎，Email：yzhshys@163.com，电话：0514-7373260

【摘要】 急性 ST 段抬高型心肌梗死（STEMI）发病是斑块破裂，继之血栓形成，血管的急性闭塞导致的。有些急性心肌梗死（AMI）的患者，虽然通过血运重建治疗使梗死相关冠状动脉开通，但由于相关冠状动脉的微循环出现“无复流”现象，使近期和远期的心血管事件发生率和病死率增加；相反，有些 AMI 患者虽然相关冠状动脉仍闭塞，但其灌注区的心肌微循环却可由侧支循环得到灌注，使抬高的 ST 段下降。因此在探讨急性心肌梗死的诊疗过程中，冠状动脉微循环的结构和功能改变应该是重要的研究领域。越来越多的证据表明，冠状动脉微循环在心肌的血供中起着重要作用，通过使用热稀释压力导管，微循环阻力指数（IMR）可以测得并量化微循环的功能。因此 IMR 是反映微循环的特异性指标。而且 IMR 不同于传统评估方法，有着操作简便、可重复性强、特异性高等多重优势。近年来关于 IMR 的研究突飞猛进，很多已知与 STEMI 有关的指标和 IMR 的相关性研究也不断发展。本文就目前有关 STEMI 患者中 IMR 相关性的研究进展进行综述。

【关键词】 冠状动脉疾病； ST 段抬高型心肌梗死； 经皮冠状动脉介入术； 微循环； 微循环阻力指数； 心肌血流储备分数； 微血管阻塞
DOI:10.3760/cma.j.issn.1008-6706.2020.15.031

Research progress on the correlation of microcirculatory resistance index in patients with STEMI
Zhou Jianwei, Zhang Jing, He Shenghu
Department of Cardiovascular Medicine, the Subei People’s Hospital Affiliated to Yangzhou University, Yangzhou, Jiangsu 225000, China
Corresponding author: He Shenghu, Email: yzhshys@163.com, Tel: 0514-7373260

【Abstract】 Acute ST segment elevation myocardial infarction (STEMI) is caused by plaque rupture, followed by thrombosis and acute occlusion of blood vessels. In some patients with acute myocardial infarction (AMI), although infarction-related coronary arteries are opened by revascularization, there is no reflow due to the associated coronary microcirculation. Increase the incidence and mortality of short-term and long-term cardiovascular events. On the contrary, although the associated coronary artery is still occluded in some AMI patients, the myocardial microcirculation in the perfusion area can be perfused by collateral circulation, resulting in the decrease of the elevated ST segment. Therefore, in the process of diagnosis and treatment of AMI, paying attention to the structural and functional changes of coronary artery microcirculation should be an important research field. More and more evidence shows that coronary artery microcirculation plays an important role in myocardial blood supply. Through the use of thermal dilution pressure catheter, microcirculation resistance index (IMR) can measure the function of microcirculation. IMR is a specific index to reflect microcirculation, which is different from the traditional evaluation method, and has multiple advantages, such as simple operation, strong repeatability, high specificity and so on. In recent years, the research on the correlation of IMR is advancing by leaps and bounds. This paper reviews the current research progress on the correlation of IMR in STEMI.

【Key words】 Coronary disease; ST-segment elevation myocardial infarction; Percutaneous coronary intervention; Microcirculation; Microcirculation resistance index; Fractional flow reserve, myocardial; ST-segment elevation resolution; Microvascular obstruction
DOI:10.3760/cma.j.issn.1008-6706.2020.15.031