Objective: Intradialysis hypertension (IDH) is a frustrating complication among hemodialysis (HD) patients, and the causes are complex. Volume excess is thought to be important in the pathogenesis of hypertension among HD patients. The purpose of this study was to investigate whether additional volume reduction will result in improvement in IDH, and to evaluate the hemodynamic tolerance of the IDH patients.

Methods: A prospective, open-label, single center study of 22 patients with pre-dialytic hypertension entered in Group A, and other 11 patients with normal pre-dialytic blood pressure were in Group B. In both groups we give the patients dry-weight reduction. Blood pressure was monitored per dialysis session. The mean weights of the first treatment at the end of each dialysis run.

Results: The primary outcome was change in systolic interdialytic ambulatory BP. In Group A, the postdialysis weight was reduced by 0.67 kg at 4 weeks and resulted in 22.39 to 10.75 mmHg (95% CI: −22.39 to −6.73 mmHg; p = 0.078) change in pro-diastolic BP. Other causes involved have to be further researched.

Conclusion: This study suggests that the further reduction of dry weight is an efficacious and well-tolerated maneuver to improve BP control in IDH patients with pre-dialytic hypertension. However, for those patients who have normal pre-dialytic hypertension, the volume excess might not be the main cause for IDH. Other causes involved have to be further researched.

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0355
Risk Factor for Catheter-related Infection in Patients with Tunneled Hemodialysis Catheters and the Treatment of Pathogens
Xiaoya Tong, Yan Zha, Ying Hu, Yan Ran
Guizhou Provincial People’s Hospital, Guiyang, China

Objective: To analyze the risk of factor for catheter-related infection in the patients with tunneled hemodialysis catheters and the treatment of pathogens. Provide a reference for further prevention and treatment of catheter infections.

Methods: A total of 155 patients carried the tunneled hemodialysis catheters, male 89 cases, female 66 cases. And 22 patients in our hospital diagnosed catheter infection which occurs. Long-term indwelling catheters for use in patients with general information (gender, age, BMI, smoking history), primary disease, albumin levels, anemia, indwelling catheter time and other factors compared to patients infected with the catheter and catheter infection pathogens statistics types, sensitivity analysis and treatment factors were analyzed. Using SPSS 17.0 statistical software for analysis.

Results: Multiple logistic regression analysis showed that diabetes mellitus, blood sugar level, hemoglobin, hypoproteinemia, deep vein indwelling catheter time were the risk factors for catheter-related infection. Catheter main pathogens of Gram-positive bacteria accounted for 60.5%, Gram-negative bacteria accounted for 39.5%.

Conclusion: The incidence of catheter-related infection can be reduced by improving nutrition status, controlling blood sugars, correcting anemia and shortening the time for indwelling catheter in deep vein. Most of the bacterial infections are Gram-positive bacterial infections.

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0356
Protective Effect of Atorvastatin Combined with Far-infrared Radiation on Arteriovenous Fistula Thrombosis
Shiping Chen, Yan Zha, Jingjing Da
Guizhou Provincial People’s Hospital, Guiyang, China

Objective: To investigate the clinical effect of atorvastatin combined with far-infrared radiation on autogenous arteriovenous fistula in patients with chronic kidney disease undergoing maintenance hemodialysis.

Methods: Patients used autogenous arteriovenous fistula more than one year in Guizhou Provincial People’s Hospital hemodialysis centers were randomly divided into combination therapy group and control group. Patients in combination therapy group treatment with atorvastatin combined with far-infrared radiation, control group, matched with age and sex, were not treated with atorvastatin. Blood flow changes and the incidence of fistula dysfunction were detected by Doppler ultrasound. Demographic characteristics, high-sensitivity C-reactive protein (hs-CRP), fibrinogen, D-dimer, hemoglobin, lipids, and hemodialysis adequacy (Kt/v) were collected. After 1-year follow-up, the incidence of fistula thrombosis and blood flow changes were compared in two groups.

Results: Compared with the control group, after combination therapy for 1 year hemodialysis adequacy were significantly higher (p < 0.05) and hs-CRP, total cholesterol, LDL-C, D-dimer were decreased. Blood flow value in combination therapy group was higher than control group (p < 0.05). At the end of follow-up, one case in combination therapy group and 3 cases in control group experienced AVF dysfunction (97.36% vs. 93.02%).

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Conclusion: Treatment with far-infrared radiation therapy via reducing inflammatory factors and thrombosis factors to protect AVF and deserve to be widely used in clinic.

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0357
Effect of Peritoneal Dialysis Combined with Hemodialysis on End-stage Renal Disease
Jing Wu, Yan Zha, Pinghong He
Guizhou Province People’s Hospital, Guiyang, China

Objective: To explore the curative effect of hemodialysis combined with peritoneal dialysis treating the end-stage renal disease.

Methods: Selected 120 patients who were diagnosed end-stage renal disease in our department from July 2012 to December 2013. According to the types of dialysis, they were randomly and equally divided into combination group, hemodialysis group and peritoneal dialysis group. Follow up for 3 years, observed renal function, biochemical index, lipid metabolism, renal morphology and blood flow signal changes, as well as the incidence of complications and survival of three groups before and after treatment.

Results: After different treatments, renal functions of three groups of patients were significantly improved. The urea nitrogen (BUN) and serum creatinine (Scr) of the combination group had no significant difference from hemodialysis group (P > 0.05), but they were significantly lower than that of peritoneal dialysis group (P < 0.05). The levels of hemoglobin and albumin of the combined group were significantly higher than peritoneal dialysis and hemodialysis group, and the differences were statistically significant (P < 0.05). Compared with hemodialysis group, the rising amplitudes of hemoglobin and red blood cells of peritoneal dialysis were higher (P < 0.05) but the level of albumin (ALB) was lower (P < 0.05). Compared with peritoneal dialysis group, the combination group had lower levels of triglyceride (TG), low density lipoprotein (LDL-C), very low density lipoprotein (VLDL) and a higher level of high-density lipoprotein increased (HDL-C) (P < 0.05), but a less significantly different level of the total cholesterol (TC) (P > 0.05).

Conclusion: Combined dialysis treatment for end-stage renal disease has better effect, less complications and increased survival rate, and is worth of clinical promotion.

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0358
Analysis of Clinical Features of Peritoneal Dialysis-related Peritonitis
Shuang Chen, Yan Zha
Guizhou Province People’s Hospital, Guiyang, China

Objective: To understand the status of clinical features and pathogenic bacteria by analyzing the related factor, in order to improve the patients’ quality of life.

Methods: Selected the patients from January 2012 to December 2014, and recorded each patient’s gender, age, primary disease, intestinal disorders (diarrhea or constipation), peritoneal fluid culture, serum albumin, hemoglobin, serum creatinine, serum calcium, serum phosphorus, parathyroid hormone, peritoneal dialysis age. Summed up the pathogenic bacteria, clarify the dangerous factors of PD related peritonitis.

Results: (1) There were 46 cases including 58 times of PD related peritonitis in total of 126 cases, and 47 cases culture positive in the 58 times of peritoneal fluid culture, the positive rate was 81.03%, including 29 cases with Gram-positive cocci (61.70%), Gram-negative bacilli in 12 cases (25.53%), 6 cases of fungus (12.76%). (2) There was no difference between the two group of patients’ age, gender, dialysis age and primary disease. (3) Peritonitis patients’ red blood cell, hemoglobin, serum albumin, serum calcium levels were lower than the control group (P < 0.05). (4) Peritonitis group diarreha/constipation increased significantly compared with the control group (P < 0.01). (5) Peritonitis group of 58 patients with a total of three deaths, 6 cases changed to hemodialysis, the rest of the patients were cured. The 6 cases of fungal peritonitis, 4 cases had extubation and changed hemodialysis, 2 cases died.

Conclusion: (1) Gram-positive bacteria are the most common pathogens in PD-related peritonitis. (2) Poor nutrition, anemia, electrolyte disorder, bowel dysfunction are the risk factor of PD-related peritonitis. (3) Fungal peritonitis had a higher rate of mortality and dropout rates.

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0361
Regular Urokinase Intervention in Catheter Maintenance in Patients with Maintenance Haemodialysis
Ying Hu, Yan Zha, Shan He
Guizhou Province People’s Hospital, Guiyang, China

Objective: To explore the curative effect of Long-term catheter maintenance in uremia patients with regular thrombolysis therapy by urokinase.

Methods: Forty uremia patients were recruited from our hospital between October 2008 and December 2014. They were all received blood purification average from 3 to 6 years. All of them were cuff tube. 21 patients were male, average age, 68.40. They were divided into two groups randomly: group A (19 cases), they were treated with thrombolysis therapy by urokinase after dialysis. These patients received thrombolysis therapy by urokinase regularly (once every 2 weeks), sealed with heparin when blood purification were ended. And control group (21 cases) only treated with heparin sealing. Then compare the index changes, such as bun, Scr, KT/v, PT, APTT.

Results: Compared blood flow, venous pressure, Bun, Scr, PT and APTT of the two group patients before treatment. There were no statistically significant differences (all P > 0.05). The levels of venous pressure of urokinase intervention group on a regular basis was 68 ± 30.5 mmHg, Bun (7.2 ± 3.7 mmol/l), Scr (200.5 ± 90.4 umol/l), there were statistically significant difference (all P < 0.05). CRP obviously reduced after the intervention compared with control group; the blood flow and KT/v obviously increased, there were statistically significant differences (all P < 0.05). There were no statistically significant differences (all P > 0.05) of PT and APTT. There were 2 cases in the group thrombolysis therapy by urokinase, accounting for 11%. Ten people in the control group, accounting for 47%. There were no statistically significant differences (P > 0.05) of bleeding.

Conclusion: Thrombolysis therapy by urokinase regularly can improve the quality of dialysis patients, reduce the incidence of catheter thrombosis and extending the service life of the catheter.

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0362
Effects of Serum of Hemodialysis Patients on TF and PAI-1 Secretion by Human Vascular Endothelial Cells During Treatment with Atorvastatin and Anticoagulant
Wen Zeng, Yan Zha, Ying Hu
Guizhou Province People’s Hospital, Guiyang, China

Objective: To elucidate the effects of serum of patients with hemodialysis on tissue factor (TF) and plasminogen activator inhibitor-1 (PAI-1) secretion of human vascular endothelial cells (HUVEC) during treat of atorvastatin and anticoagulant.

Methods: Twenty patients who snuffbox arteriovenous fistula (SAV) or central venous catheterization in hemodialysis patients involved were divided into two groups randomly, 10 patients treated with atorvastatin and anticoagulant and the others with anticoagulant for 3 months. The blood was collected from patients at 0 months, 1 month, 2 months, and 3 months during treatment. Serum TNF-α, IL-1β were measured by ELISA. TF and PAI-1 secretion of HUVEC stimulated with serum of patients with hemodialysis undergoing drug treatment were detected, TF and PAI-1 expression level were assayed by RT-PCR.

Results: TF and PAI-1 secretion were significantly increased in HUVEC stimulated with serum of patients with hemodialysis undergoing drug treatment. Then, TF and PAI-1 expression level were assayed by RT-PCR.

Conclusion: Serum of patients with hemodialysis promote the secretion of TF and PAI-1 in HUVEC. The dysfunction of HUVEC induced by serum of patients with hemodialysis may be related to mediators of inflammation. Treatment...