December 2014. For comparison purposes, patients were divided into 2 groups: control group used the practical course of PD programs eight step operation, five steps to take over (n = 20), experimental group used modified PD in fluid technology training (n = 20), the method of five step operation simplified into three steps: a pull, right hand holding dual system pipeline, left a TAB. Second, twist, left hand picked up the short tube, right index finger and thumb and iodine caps unscrewed to abandon. Three, will be a short tube end both connect tighten with double systems. Two groups of patients adopt the Baxter duplex system, observed in the qualified rate of liquid in operation, completed the training time and the incidence of peritonitis have statistically significant.

Results: There was no statistical significance in liquid operation qualification rate. Compared with the control group (7.2 ± 1.3 days), experimental group (3.6 ± 1.5 days) completed the training time significantly shortened (p < 0.05) and less the incidence of peritonitis dropped significantly (p < 0.05).

Conclusion: The proportion of the aged with PD is rapidly progressive growth worldwide, elderly patients with metabolic disorders, disorders of thinking, memory loss, slow, insensitive, decreased vision physiological functions such as degenerative changes. Modified of PD in fluid technology will take over the five step method to three steps, can effectively avoid the connection cause “around” action caused in the process of exposure to pollution, and can solve some insufficient efforts in elderly patients because of the little finger and ring finger to grip the dual system. Not only reduced PD training time, but also to reduce the incidence of peritonitis significantly.

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0340
Analysis of Pathogens and Drug Resistance in Peritonitis in Elderly Patients Treated with Continuous Ambulatory Peritoneal Dialysis
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Objective: To investigate the pathogens and drug resistance on peritonitis in the elderly patients treated with CAPD, and examine the drug resistance for empirical anti-pathogen management.

Methods: 45 cases with peritonitis associated with peritoneal dialysis in the elderly patients from The People’s Hospital of Guizhou Province were reviewed between January 2013 to December 2014, and the data were retrospectively analyzed regarding findings of pathogens, drug resistance and outcomes of the 45 cases CAPD related peritonitis in the elderly patients.

Results: 45 elderly patients including 28 cases of male and 17 female with average age of 65 ± 9 getting three times of hemodialysis therapy (4–4.5 hours a time). The causes include 17 cases of primary glomerular nephritis (37.7%), 10 cases of diabetic nephropathy (22.2%), 10 cases of hypertension of kidney disease (22.2%), obstructive nephropathy in 3 patients (6.7%), renal arteriolar sclerosis in 3 patients (6.7%), systemic vasculitis renal damage in 1 case (2.2%) and 1 case with lupus nephritis (2.2%). A total of 26 strains were cultured including 15 Gram-positive strains (57.69%), 9 Gram-negative strains (34.61%) and 2 fungi (7.69%). The most common Gram-positive bacteria were Staphylococcus aureus (8 strains), Staphylococcus haemolyticus (4 strains), Staphylococcus epidermidis (2 strains) and rotary’s Staphylococcus aureus (1 strain). Drug sensitivity test of the Gram-positive strains showed that the two highest antibiotic resistance were penicillin (84.63%) and cefazolin (27.30%), while the lowest antibiotic resistance were vancomycin, rifampin. Drug sensitivity of the Gram-negative bacteria showed that antibiotics with the lowest resistance were ampicillin (72.22%), and all of the cultured Gram-negative bacteria are sensitive to imipenem.

Conclusion: The most common pathogens causing peritoneal dialysis associated peritonitis in elderly patients is Gram-positive bacteria. Fungal peritonitis in peritoneal dialysis significant increase, and is the most important reason for patients’ death and dropout.

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0346
Effect of Individualized Intervention on Home Blood Pressure and Blood Pressure Variability in Peritoneal Dialysis Patients with Hypertension
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Objective: To investigate home blood pressure variability and to observe the effect of individualized intervention on home blood pressure variability in peritoneal dialysis (PD) patients with hypertension.

Methods: A total stable 106 PD patients were subjected to home blood pressure monitoring. The coefficient of variation (CV) was used as indicator for home blood pressure variability. Patients with uncontrolled hypertension were subject to cardiothoracic ratio, B-type natriuretic peptide (BNP), serum sodium measurement, and evaluation of antihypertensive treatment, and were used the individualized intervention including decrease of volume overload and adjustment of antihypertensive agents. They were followed up for home blood pressure and blood pressure variability for 2 months.

Results: Two patients (1.9%) had dipper pattern blood pressure, 58 cases (54.7%) had non-dipper blood pressure. 46 (43.4%) patients had anti-dipper blood pressure. 62 of 106 patients (58.4%) were identified to have uncontrolled hypertension. After the individualized intervention, home blood pressure decreased from 159.6 ± 16.9/98.1 ± 14.1 mmHg to 139.8 ± 14.2/82.3 ± 11.8 (P < 0.001), home systolic blood pressure variability decreased from 12.8 ± 3.2% to 10.2 ± 2.8% (P < 0.01), home diastolic blood pressure variability decreased from 11.1 ± 2.6% to 9.8 ± 2.8% (P < 0.01).

Conclusion: Individualized intervention can improve home blood pressure controlled and blood pressure variability.

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0350
Factors That May Affect Peritonitis In 110 Patients Undergoing Peritoneal Dialysis
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Objective: Combining the off-dialysis experience and the clinical statistics of the patients, we try to find some clues differing from the clinical and pathological factors we knew before that may closely be connected with the happening of peritonitis.

Methods: Questionnaire on patients in our dialysis center who undertook dialysis for at least 3 months with smart compliance. In our survey: the carer’s impact on the patients (carer’s relationship with the patient; carer’s education level; if carer’s job is affected; if carer lives with the patient), the sanitation of the dialysis room (if patient operates on his own, if patient washes his hands before dialysis, the housing area of his home, the number of his family members), the life quality as well as the family economics afforded (if patient takes part in social work or study, the average income of his family, the medical insurance provided, the economic burden of medical care). We also regard to their clinical statistics (basic clinical information, biochemical indicators) as well as the first time point when peritonitis took place on these patients exactly.

Results: Totally 110 patients (average age: 58.07 ± 16.072 y; weight: 62.43 ± 12.67 kg; dialysis age: 2.70 ± 2.38 y) involved with answer sheets (results preserved) fully completed, no crossing out. (1) Factors that related to peritonitis COX has been done with indicators involved. nPCR, Scr, Bun, if dialysis and patient’s operating on his own VS not, patient’s processing of his own room VS not, carer well-educated VS not, carer’s social work affected VS not, all above predicts as an independent factor to peritonitis. (2) Kaplan-Meier analysis for seperated important factors related to peritonitis. Posted as shown, each with obvious trending difference but no statistical significance (P > 0.05).

Conclusion: We found that self operating, owning independent room, carer well-educated, carer’s less influenced by his caring job may be the protective factor for peritonitis. The Kaplan-Meier analysis showed trending difference, but of no statistic significance as a regret. Further research requires more statistics or study.
Dry-weight Reduction in Patients with Intradialysis Hypertension: A Small Prospective Controlled Trial

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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 IDH, undergoing chronic intermittent hemodialysis at the Tongji Hospital of Shanghai. Eleven patients with pre-dialytic hypertension entered in Group A, other 11 patients with normal pre-dialytic blood pressure were in Group B. In Group A, the postdialysis weight was reduced by 0.67 kg at 4 weeks and resulted in 0.18 kg at 4 weeks and resulted in 2.7 mmHg; p = 0.022) change in pro-systolic BP and 0.078) change in pro-diastolic BP. In Group B, the postdialysis weight was reduced by 0.18 kg at 4 weeks and resulted in 3.72 mmHg (95% CI: −10.96 to 9.33 mmHg; p = 0.519) change in pro-diastolic BP. The mean score subjectively assigned by patients to dialysis quality on a 1–10 analog scale during each dialysis run was as follow: Group A: 9.3 ± 0.76 vs. Group B: 8.8 ± 1.32 (p = 0.13).

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 Tunned Hemodialysis Catheters and the Treatment of Pathogens

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Objective: To analyze the risk of factor for catheter-related infection in the patients with tunned 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 tunned 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 sugar, correct 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

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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%).