cocculture system using Transwell. After the coculture is done, the gene and protein expression level of PMCs in up wells are tested by RT-PCR, Immunofluorescence and Western blotting respectively.

Results: The IL-10 mRNA expression level all decrease in 6–24 h while increase 24 h later, and is lower in M1 than other groups (M0, M2a, and M2c). M1 shows high expression of IL-6, IL-12, while the M2a and M2c relatively lower. The mRNA expression level of CCL17 is higher in M2a while CCL17 higher in M2c. Compared to the control group, fluorescence intensity of E-cadherin in coculture groups is decreased, and the M2c group is the most obvious with statistical difference (P < 0.05). The fluorescence intensity of α-SMA in PMCs cocultured with macrophage is higher than the control group. The gene expression of E-cadherin in PMCs is down-regulated when cocultured with M2c (P < 0.05). α-SMA expression level is up-regulated after cocultured with M2a or M2c (P < 0.05). Compared with the control group, the protein expression of E-cadherin is down-regulated and α-SMA is up-regulated when cocultured with M2c.

Conclusion: We successfully induce macrophage subsets (M1, M2a, M2c) differentiation using THP-1 with TPA and LPS+IFN-γ, IL-4, IL-10. 2. Macrophage subtypes up-regulate α-SMA expression and down-regulate E-cadherin, promoting EMT of PMCs in some degree. And the effect of M2c is the most significant.

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0292
Role of TRPC in Endothelial-Mesenchymal Transition of Human Peritoneal Mesothelial Cells Induced by High Glucose
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Objective: To investigate the role of TRPC in the process of endothelial-mesenchymal transition (EMT) of human peritoneal mesothelial cells (HPMSV5) induced by high glucose.

Methods: (1) HPMSV5 cells were exposed to elevated glucose (50, 75, 115 mM) or d-mannitol (osmotic control). The expression of mRNA level of TRPC subtype (1/3/4/5/6/7) was detected by RT-PCR and immunofluorescence after culturing for different times (24 h, 48 h, 72 h). (2) Effects of 2-APB (TRPC inhibitor) on the EMT in human peritoneal mesothelial cells induced by high glucose. HPMSV5 were grouped as follow: normal group, high glucose group (HG), isotonic control group, HG+2-APB (100 mM) group, and isotonic control-2-APB (100 mM) group. The expression of mRNA and protein levels of TRPC subtype (1/3/4/5/6/7), α-smooth muscle actin (α-SMA), and E-cadherin were detected by RT-PCR and immunofluorescence.

Results: The expression of TRPC1/3/6 and α-SMA in high glucose (50, 75 mM) was increased, and the expression of E-cadherin was down-regulated both in a dose-dependence manner (P < 0.05). High expression of TRPC1/3/6 and α-SMA and low expression of E-cadherin could be reversed by using 2-APB (TRPC inhibitor) (P < 0.05).

Conclusion: The expression of TRPC increased in human peritoneal mesothelial cells induced by high glucose. 2-APB could partly prevented EMT in human peritoneal mesothelial cells induced by high glucose. We can conclude that TRPC plays an important role in EMT process of human peritoneal mesothelial cells.

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0299
Comparative Study of Chronic Renal Failure Patients’ Efficacy Between Sustained Low-efficiency Daily Dialysis (SLEDD) and Intermittent Hemodialysis (IHD)
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Objective: To compare the different efficacies of chronic renal failure (CRF) patients between sustained low-efficiency daily dialysis (SLEDD) and intermittent haemodialysis (IHD), study the characteristics of these two kinds of dialysis patterns, in order to provide the basis for different clinical patients choosing a scientific and rational hemodialysis therapy.

Methods: During the time from November 2012 to March 2015, there were 40 CRF patients who needed hemodialysis therapy from Qinghai province people’s hospital gathered in this study. Recorded their personal informations, monitored their blood pressure, blood solute clearance situation and electrolyte changes before and after dialysis.

Results: Two groups’ post-dialysis mean blood urea nitrogen (BUN), serum creatinine (Cr), potassium (K'), sodium (Na'), calcium (Ca') and phosphorus (P') respectively, as well as their mean arterial pressure (MAP) and their mean heart rate (HR) had statistically significant differences when compared with pre-dialysis (P < 0.05). SLEDD group had a better effect than IHD group at K'/V, potassium remove index, sodium remove index, calcium remove index and phosphorus remove index, these results were actually statistically significant (P < 0.05). blood urea nitrogen rate of decline and creatinine remove index had no significant differences (P > 0.05). The mean arterial pressure (MAP) of patients from two groups had fallen after dialysis, but SLEDD group’s changing was smaller than IHD group, the difference was in fact statistically significant (P < 0.01). After dialysis, two groups patients’ heart rate (HR) had slowed, but SLEDD group’s changing was less, the difference was really statistically significant (P < 0.05).

Conclusion: Sustained low-efficiency daily dialysis (SLEDD) and intermittent haemodialysis (IHD) can effectively remove the blood small solutes of patients with chronic renal failure, effectively reduce the mean arterial pressure, and heart rate. SLEDD was more effective than IHD to lower patients’ blood potassium, sodium and phosphorus, elevated their blood calcium, had higher dialysis adequacy and a more stable hemodynamics.

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0315
Impact of C-Reactive Protein Variability on Failure of Dialysis Access in Hemodialysis Patients
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Background: Chronic inflammation is associated with the enhancement of vascular calcification and mortality in dialysis patients. Although C-reactive protein (CRP) is commonly measured as the surrogate marker of inflammation, the impact of CRP variability upon failure of dialysis access, however, has rarely been investigated.

Methods: We performed a retrospective study to evaluate the relationship of CRP variability and access failure at a medical center in southern Taiwan. The demographic and biochemical data were reviewed and collected. The access failure included the crash of arteriovenous shunt and permanent catheter.

Results: A total of 318 chronic hemodialysis patients were enrolled. They were divided into three groups defined as consistently low (n = 65), consistently high (n = 39), and high fluctuation (n = 214), according to CRP variability assessing at many times during 7-year dialysis period. Patients in high fluctuation group exhibited older, with higher body mass index, and greater proportion of male. Their serum albumin level and urea reduction rate were also lower. Meanwhile, significantly highest dialysis access failure rate was observed in the high fluctuation group. (consistently low: 0.10 episode/patient-year; consistently high: 0.11 episode/patient-year; high fluctuation: 0.14 episode/patient-year; p = 0.037)

Conclusion: We concluded that high prevalence of high CRP variability in chronic hemodialysis patients. Furthermore, the CRP variability was associated with dialysis access failure. This finding punctuated an important role of chronic inflammation in this common clinical condition.

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0332
Early Ambulation and Incidence of Drift Tube After Peritoneal Dialysis Catheter Insertion
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Objective: Poor dialysate drainage is an important factor that results to the failure of peritoneal dialysis. Patients who had just underwent an operation