

Based on the Wet This Excess or Insufficiency of Qi and the Prevention and Treatment of Peritoneal Dialysis Combined with Chronic Heart Failure

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Abstract: Peritoneal dialysis is one of the main treatments for patients with end-stage renal disease. Chronic heart failure is one of the complications of peritoneal dialysis patients. Affect the prognosis and quality of life of patients. Based on the literature analysis and clinical experience, this paper analyzes the peritoneum from the angle of dampness, warming yang and tonifying deficiency. The etiology, pathogenesis and treatment of dialysis complicated with chronic heart failure were discussed. It is considered that peritoneal dialysis with chronic heart failure is This deficiency is based on deficiency of heart and kidney, and the connotation of dampness, turbidity and blood stasis is the standard. The method should be "warming the yang of heart and kidney, expelling turbidity and toxin and removing blood stasis". Aim at Maintenance peritoneal dialysis patients with chronic heart failure should warm up the heart and kidney, strengthen the spleen, eliminate dampness, remove turbidity and remove blood stasis.

Peritoneal dialysis has become the main choice because of its advantages of relatively low cost, convenience at home and protection of residual nephron[1]. The number of peritoneal dialysis patients in China increased rapidly, with an increase of about 8,000 cases/year[2]. Chronic renal failure belongs to the categories of edema, wasting, lumbago, stranguria, etc. in traditional Chinese medicine. Chronic renal failure is located in the kidney, spleen and stomach and intestines. It is considered that the etiology and pathogenesis of chronic renal failure in TCM are mainly deficiency of spleen and kidney, internal knot of dampness and toxin is the standard, deficiency is the standard, and deficiency and excess are mixed. Pathology is "damp-heat, congestion, turbid phlegm" [3]. Spleen-related, spleen deficiency can not nourish the innate source, kidney deficiency is acquired dystrophy. Modern Chinese medicine believes that the basic pathogenesis of chronic kidney disease is spleen weakness and immune dysfunction. It is advocated that spleen should be treated at all stages of the disease progress, with emphasis on strengthening the spleen and eliminating dampness, restoring the physiological functions of spleen and stomach in the middle energizer, elevating the clearing and lowering turbidity, and nourishing the innate nature in the future [4].

Patients with long-term maintenance peritoneal dialysis at the end of chronic renal failure are prone to secondary pericardial effusion. Excessive pericardial effusion leads to heart failure, which seriously affects the prognosis and quality of life of patients. The pathogenesis of maintenance peritoneal dialysis complicated with chronic heart failure is mainly due to deficiency, with deficiency of heart and kidney, deficiency of heart and kidney, deficiency of spleen and kidney, and excess of dampness and blood stasis.

1. Etiology and Pathogenesis of Peritoneal Dialysis Complicated with Chronic Heart Failure

Peritoneal dialysis is one of the main alternative therapies for end-stage renal disease of chronic renal failure. In addition, peritoneal dialysis can be used as an adjuvant therapy for chronic congestive heart failure, which is suitable for patients with cardiac insufficiency caused by high volume load. Chronic heart failure belongs to the category of "chest obstruction" and "palpitation" in traditional Chinese medicine. Traditional medicine has a long history of understanding of heart failure, from "heart distension, dysphoria, and restlessness" to Zhang Zhongjing's view in Synopsis of the Golden Chamber: "A person with water in his heart is heavy, but he can't lie down with little gas, and he is troubled and frightened, and his body is cloudy." Traditional medicine has formed a unique system and medical theory for treating heart failure, but now there is little research on chronic heart failure caused by peritoneal dialysis. On the basis of summarizing predecessors, the author thinks that the main diseases of patients with chronic heart failure caused by peritoneal dialysis are heart and kidney involving spleen and lung. "Dampness, blood stasis and deficiency" play an important role in the development of diseases, and they are mutually transformed and mutually causal.

1.1 Deficiency and Heart Failure

"The Fourteenth Book of the Yellow Emperor's Internal Classic of Su Wen, Tang Ye Lao Li" records: "Emperor Yue: It is not born from tiny hairs, its five internal organs and yang are exhausted, and its semen fills the country. Its spirit lives alone, and its essence is isolated from the inside, and its qi is consumed inside, so its shape cannot be protected by clothes. When these four poles are in a hurry, it is the qi that is kept out, but its shape is applied to the outside. What can we do to cure it? [5] It is said in "A Prescription for a Thousand Dollars in Case of Emergency": "When you are over fifty years old, the yang will decline, and your heart will gradually decline." It can be seen that the deficiency of the five internal organs is the direct cause of heart failure. Maintenance peritoneal dialysis patients. Long-term control of vegetable and protein intake, passive metaplasia, deficiency of yang and qi in the five internal organs, loss of healthy movement of the spleen, loss of opening and closing of the kidney, and adverse effects of Sanjiao waterway. Gao Jining [6] believes that the etiology and pathogenesis of chronic renal failure is that spleen and kidney qi deficiency lasts for a long time, and deficiency leads to excess, which leads to accumulation of pathological products such as dampness, watery drink and blood stasis in the body. When evil persists in the body for a long time, new pathological factors are formed, such as "dampness, turbid water, blood stasis", which hinder qi activity, block collaterals, damage vital qi, form malignant circulation, lead to heart injury, and even decline. "Su Wen Ju Tong Lun" says, "If you work hard, you will gasp and sweat, so you will be exhausted." If you suddenly consume gas, you will be exhausted, and your blood will be weak, your blood will stagnate, and your water and fluid will leak out. The "Tibetan Sutra" says, "If the heart has water vapor, you will be swollen, unable to lie down, and irritable". The transportation of water depends on the steaming and opening of kidney-yang. Long-term maintenance peritoneal dialysis patients suffer from insufficient body endowment, chronic illness, fatigue, kidney damage, kidney yang deficiency, kidney failure, and skin overflow with water and

liquid. Deficiency of kidney-yang, stopping water and drinking, leading to the heart, disturbing the mind.

1.2 Blocking Heart Pulse

Long-term peritoneal dialysis patients, toxins accumulate in the body, aggravating renal fibrosis. Modern Chinese medicine [7-8] thinks that kidney fibrosis belongs to the category of blood stasis, and Gao Jining thinks that the essence of kidney fibrosis is kidney essence deficiency. Functional "living" kidney tissues are replaced by non-functional "dead" kidney tissues, kidney essence deficiency leads to no self-support for a long time, leaving only lifeless "yin substance" alone to form fibrosis [9]. Su Wen Wu's Note, Section 6, On Visceral Images, Chapter 9: "The heart is the foundation of life, and the change of God is also the appearance of its splendor, and the blood is filled with qi". In peritoneal dialysis patients, the residual kidney function is decreased, the function of kidney regulating qi is out of balance, the function of kidney yang deficiency is declining, the function of promoting and warming is declining, and blood stasis is formed in the blood stopping pulse. Blood stasis caused by various reasons can be the inducement of chronic heart failure. Qi stagnation leads to blood stasis (qi stagnation and blood stasis syndrome caused by emotional failure or stagnation of qi due to phlegm-dampness and yin-cold resistance, poor circulation of qi and blood, obstruction of veins due to poor circulation of qi and blood, obstruction of chest yang, and poor heart pulse). Yang deficiency causes blood stasis (if kidney deficiency and yang deficiency can not warm the meridians, or kidney deficiency can cause internal cold, and cold causes blood coagulation, which can also lead to blood stasis blocking collaterals. Qi deficiency and blood stasis (multi-factors, body qi deficiency or long-term illness, qi and blood circulation weakness, resulting in poor blood circulation and blood stasis). Deficiency of qi leads to the decline of zang-fu organs' function, so we see fatigue, lack of qi and laziness, blood stasis, and pain when there is no way, so the pain is like a thorn, and the painful part is fixed, so we refuse to press it.

1.3 Damp-turbid Internal Stagnation

Patients with maintenance peritoneal dialysis can use peritoneal dialysis fluid to drain out the toxins such as creatinine and urea already contained in the abdominal cavity, and then inject new dialysate containing electrolyte. The dialysate can enter the peritoneal soft tissue through the damaged peritoneum to form edema. Cao Enze [10] believes that chronic renal failure is characterized by deficiency of spleen and kidney, turbid toxin and blood stasis, weak spleen-yang, stagnation of spleen movement, endogenous water, stagnation of accumulation, edema and phlegm retention, dysfunction of kidney governing water, inability to regulate the metabolism of water and fluid in the whole body, and stagnation of water in the heart and lungs. "The Yellow Emperor's Internal Classic of the Yellow Emperor, Annotation and Evaluation of Su Wen, Inverse Tune Theory No.34" says: "A husband can't lie down, but when he lies down, he breathes, and he is a guest of water vapor. His water flows along the body fluid, and his kidney stores water, and he dominates the body fluid, and his bedroom and breathes". Turbidity stagnates, water does not dissolve, water stops inside, and it is easy to attack the heart and disturb the mind.

Prevention and treatment of maintenance peritoneal dialysis complicated with chronic heart failure by eliminating dampness, warming yang, promoting blood circulation and tonifying deficiency

The author believes that according to the etiology, pathogenesis and clinical manifestations of peritoneal dialysis patients with chronic heart failure, and referring to the literature of chronic renal failure and chronic heart failure, the treatment can be divided into early, middle and late periods. Deficiency of the spleen is the basis of the disease, and strengthening the spleen and

tonifying the kidney runs through the disease. "Dampness, blood stasis and deficiency" are the three stages of the disease, with dampness (spleen deficiency and dampness stagnation) as the origin of the disease, blood stasis (blood stasis blocking collaterals) as the pivot of disease transformation, and deficiency (heart and kidney deficiency) as the origin of the disease. At the initial stage, the syndrome of deficiency of heart and kidney yang combined with dampness and turbidity is more common. Patients with maintenance peritoneal dialysis combined with chronic heart failure often suffer from chest tightness and breath holding, which is obviously aggravated after exercise, with excessive phlegm and shortness of breath, restless sleep at night, cold limbs, edema of both lower limbs with fatigue and weakness, anorexia and loose stool, fat tongue with teeth marks, muddy and greasy fur or white and slippery pulse. Treatment can warm up yang, invigorate heart-yang, eliminate dampness and induce diuresis. Zhenwu Decoction is added with Astragalus membranaceus and Stephania tetrandra, which can warm up kidney yang and dissolve water. In the middle stage, the syndrome of deficiency of heart and kidney yang combined with stagnation of blood stasis is common. Clinical manifestations: cardiothoracic pain, such as stabbing and strangulation, with localized pain, especially at night, accompanied by chest tightness, prolonged unhealing, soreness and weakness of waist and knees, weakness and weakness, edema of both lower limbs, purple and dark tongue, ecchymosis, thin coating and astringent pulse. Treatment: warming yang, promoting blood circulation and removing blood stasis. Shenfu Decoction is added with peach kernel, safflower and other blood-activating and blood-stasis removing products. In the late stage, the syndrome of deficiency of yin and yang of the heart and kidney is more common, with clinical manifestations: gloomy complexion, panting and palpitation, dysphoria or oily forehead sweat, cold limbs, edema all over the body, pale tongue with white coating, tiny pulse or rapid pulse weakness. The treatment method is to restore yang and relieve stagnation, and the prescription is to add and subtract ginseng soup. "Dampness, blood stasis and deficiency" often interact with the human body, and syndrome types are intertwined, and there are many complications. For example, Professor Yang Hongtao [11] thinks that treating heart and kidney yang deficiency, dampness and turbid blood stasis syndrome, treating Sini Decoction to warm heart and kidney yang, promoting blood circulation, promoting diuresis and dredging pulse. Therefore, clinical problems should be analyzed in detail, and the syndrome should be added and subtracted.

2. Medical Records are Cited

Tan Mou, female, 63 years old. First visit date: October 12th, 2020. The patient's chest tightness, wheezing and choking for two months, aggravated after exercise and recumbent. Medical history: The patient had chronic renal failure for 5 years, uremia peritoneal dialysis for 3.5 years, previous hypertension for 6 years, poor blood pressure control, the highest pressure being 186/110mmHg, amlodipine besylate 5 mg/d and valsartan 50 mg/d, and denied the history of other cardiovascular diseases. Results Blood creatinine 750mol/L, urea nitrogen 16mmol/L, B-type brain natriuretic peptide 24402pg/mL, creatine kinase isoenzyme 2.245ng/L, troponin I0.389ng/MI, myoglobin 138.7ng/MI and hemoglobin 72g/L were examined in laboratory. Half a month ago, the patient suffered from occasional chest tightness and breathlessness, which worsened after exercise and recumbent, and suffered from listlessness, fatigue and weakness. Incision symptoms: chest tightness, frequent bouts of breath holding, obvious aggravation after exercise and lying down, stabbing pain in the precordial area, moderate edema of both lower limbs, cold body and limbs, anorexia, poor appetite, loose stool, fat tongue with teeth marks, muddy or white fur, and slippery pulse. There is no elevation of ST segment in ECG, and T wave is widely low and flat. At present, the peritoneal dialysis scheme is 800-1000ml ultrafiltration volume in 24 h. Diagnosis of TCM: Chest arthralgia, which is characterized by deficiency of heart and kidney yang, and drinking water

leads to heart attack. In order to warm the heart and kidney yang, the kidney yang can transform qi into water, and the prescription is modified by Zhenwu Decoction: prepared aconite root 15 g (decocted first), Poria cocos 30 g, Salvia miltiorrhiza 30 g, Paeonia lactiflora 10 g, Guizhi 10 g, Atractylodes macrocephala 10 g, Astragalus membranaceus 10 g, Stephania tetrandra 15 g, Polyporus 15 g, Plantago seed 15 g and Angelica 10g. 10 doses, decocted with water and taken twice a day.

The patient returned to the clinic on the 19th, and the symptoms were engraved: chest distress and asthma were relieved before, no pain in the precordial area, wheezing symptoms after heavy exercise, no pain in the precordial area, cold body and limbs, lower limb edema, insomnia at night, soft waist and knees, obvious lumbago and back pain, 24-hour urine volume of 500-600ml, and 24-hour peritoneal dialysis ultrafiltration volume of 800-100. Serum creatinine 782 umol/L, urea nitrogen 18mmol/L, B-type brain natriuretic peptide 22346pg/mL, creatine kinase isoenzyme 2.245ng/L, troponin I 0.061ng/mL, myoglobin 48.990ng/mL, hemoglobin 100g/L, the front treatment was effective, followed by the front addition and subtraction treatment. Remove Polyporus umbellatus, Angelica sinensis, Semen Plantaginis, reduce Radix Aconiti Lateralis Preparata to 6g, decoct first, reduce Poria to 15g, reduce Radix Salviae Miltiorrhizae to 15g, add Achyranthes bidentata 15g and Dipsacus asperata 15g. 7 doses, decocted with water, twice a day. Follow-up to December, 2020 showed that the patient had no obvious symptoms of chest distress and wheezing.

Press: At the first diagnosis, the patient suffered from moderate edema of both lower limbs, chest tightness and shortness of breath, and the four diagnosis methods were combined. The syndrome differentiation was heart and kidney yang deficiency, water drinking caused heart and kidney yang deficiency, transpiration and gasification were out of control, and the triple energizer was unfavorable for vomiting, so the body was swollen and urination was unfavorable. If the yang is weak, the promotion is unfavorable, and the function declines, the spirit will be exhausted; Kidney-yang deficiency, weak agitation, and water affecting the heart and lungs, so chest tightness and pain. Zhizhenwu Decoction was used to warm kidney-yang and dissolve water, so as to improve chest distress and palpitation. Chronic heart failure belongs to the category of "chest obstruction" in traditional Chinese medicine, which involves both kidney and heart. Chinese aconite root is the first medicine of "returning Yang to save the inverse", warming kidney Yang to transform qi into water, warming spleen Yang to suppress Yin to warm water and dampness; Poria cocos and Atractylodes macrocephala Koidz invigorate qi and spleen, promote diuresis and dampness; Angelica blood, blood and pain; With ginger and aconite to warm yang and dispel cold; Paeonia lactiflora can relieve urination to relieve water. Wu Tang is from Treatise on Febrile Diseases. The prescription is full of heat and benefit, the acid is mild in the benefit, the spleen and kidney are taken into account, and the emphasis is on warming the kidney and promoting water. Second, the diagnosed patients have obvious lumbago and spleen and kidney deficiency. Achyranthes bidentata and Eucommia ulmoides Oliv. are added to strengthen the waist and bones.

3. Conclusion

With the number of peritoneal dialysis patients increasing year by year, chronic heart failure is an important complication of peritoneal dialysis, and the incidence rate is very high. Based on the pathogenesis of "dampness, blood stasis and deficiency", this paper recognizes the disease and puts forward the idea of eliminating dampness, warming yang, activating blood circulation and tonifying deficiency to treat maintenance peritoneal dialysis complicated with chronic heart failure, which provides ideas for the diagnosis and treatment of various diseases.

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