

Preliminary Discussion About Ascites

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ABSTRACT

This article introduces ascites, which is one of the common clinical manifestations in the work of clinicians, and its pathological mechanism is very complex, involving multiple clinical disciplines and systems. This article will gradually discuss the causes, clinical manifestations, and diseases related to ascites. In particular, two thirds of patients with liver cirrhosis will have ascites within 10 years. According to the clinical practice class held in the Department of Gastroenterology at the undergraduate stage, the teacher explained and commented on the actual cases, and the author read the literature after the class. Finally, this article was formed, hoping to have a better understanding of ascites related diseases in the future.

KEYWORDS

Ascites; liver cirrhosis; etiology; clinical manifestations; diagnosis; initial treatment; treatment strategy

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INTRODUCTION

Ascites is one of the common clinical manifestations in clinical work, and its pathological mechanism is very complex, involving multiple clinical disciplines and systems [6]. Ascites is one of the most prominent manifestations in the decompensation period of liver cirrhosis, about 60% of liver cirrhosis patients will have ascites within 10 years; the stubborn attack of ascites reduces the 2-year survival rate of patients to about 30% [26]. At present, the research status at home and abroad includes new diuretics, vasoconstrictive drugs, massive drainage of ascites, transjugular intrahepatic portal shunt and rifaximin, non-selective β ; the treatment of obstinate ascites in new therapeutic aspects such as receptor blockers aims to provide new ideas for clinicians to treat obstinate ascites, so as to improve patients' quality of life and survival rate [26]. Cirrhotic ascites is one of the clinical manifestations of decompensated cirrhosis, cirrhotic ascites belongs to the category of bulging in traditional Chinese medicine, it is characterized by abdominal distension, distension like a drum, sallow skin color, and exposed venation [36].

Ascites is one of the most prominent symptoms in the late stage of cirrhosis of the liver. TCM (Traditional Chinese Medicine) belongs to the category of "bulge". Bulging refers to a kind of disease syndrome in which the abdomen is swollen like a drum, it is clinically characterized by bloating, stretching as fast as a drum, yellowish skin, and exposed veins, so it is called bulging [38]. The name of bulging disease was first seen in the Internal Classic. For example, the chapter "Spiritual Pivot · Water Bulging" said, "How about bloating?" Qi Bo said: abdominal distension, both big and big, is also like skin swelling, pale, and abdominal tendons rise, and so on "Later generations of famous scholars have also described bulging [38]. For example, Li Zhongzi of the Ming Dynasty pointed out in his book "The Medical School Must Read: Edema and Bulging" that there is a difference between bulging and bruising in the name of disease [38]. Bulging people are hollow and have nothing, and their abdominal skin is tight, and most of them belong to qi, the bruising people have something in the middle, their abdominal shape is full, and they are neither insects nor blood "It is also like Jing Yue Quan Shu · Qi Fen Zhu Zhang Jingyue in the Ming Dynasty." [38] A single bloated belly is named Guzhang, because it looks like a drum, although it is firm and empty outside or it is gathered with blood and cannot be dissolved, its poison is like a poisonous insect, it is also called insect distension, and the limbs are not injured, the distension is only in the abdomen, so it is also called single abdominal distension " [38].

ABOUT ASCITES

In the current etiology and classification of ascites, mainly cardiogenic ascites, hepatogenic ascites, nephrogenic ascites, etc., as far as the digestive system is concerned, different digestive system organ diseases will also produce ascites of different properties due to different pathological mechanisms [6]. Therefore, the differential diagnosis and treatment of ascites is still a major clinical difficulty; at present, there are few summaries of ascites related intestinal diseases, through reviewing the existing literature and data, Summarize the primary intestinal diseases and systemic diseases involving the intestinal tract related to ascites, so as to provide some valuable reference for digestive physicians in the diagnosis and treatment of ascites related intestinal diseases [6].

Ascites refers to excessive accumulation of free fluid in the abdominal cavity downstream of the pathological state, which can be caused by a variety of diseases [7]. Ascites is a common clinical symptom. Gastroenterologists need to differentiate many diseases that cause ascites in their clinical work [13]. Digestive diseases with ascites as the main manifestation mainly include tuberculous peritonitis, decompensated cirrhosis, portal vein thrombosis, and abdominal metastasis secondary to gastrointestinal malignant tumors [13].

ASCITES AND DISEASES

Anti-contact associated protein like 2 (CASPR2) antibody encephalitis is a rare autoimmune disease of the central nervous system [1]. Hashimoto thyroiditis is also an autoimmune disease. Anti CASPR2 antibody encephalitis is associated with Hashimoto thyroiditis, with hypothyroidism and ascites [1].

The exosomes from ascites of patients with epithelial ovarian cancer (ovarian cancer) have an invasive effect on the dry characteristics of ovarian cancer stem cell like cells (OCS-LC), ADE of ovarian cancer can enhance and maintain the dry characteristics of OCS-LC, promote the invasion and metastasis of tumor cells, the exosomes from ovarian cancer (OCDE) were extracted by ultracentrifugation, including ascites from ovarian cancer patients and exosomes from A2780 cells (i.e. ascites derived exosomes (ADE) and cell derived exosomes (CDE)), but CDE is superior to ADE [4]. To analyze the lymphocyte composition in ascites of high-grade serous ovarian cancer (HGSOC) and its correlation with clinical features, 48 (81.4%) of 59 cases had ascites, 11 (18.6%) had no ascites, CD3+T in ascites ($70.2\% \pm 15.6\%$ vs $78.1\% \pm 6.7\%$, $P=0.014$), CD8+T ($38.3\% \pm 11.2\%$ vs $47.7\% \pm 10.1\%$, $P=0.014$) and CD16-CD56 bright NK (2.0% (0.8%, 3.6%) vs 4.2% (1.5%, 7.1%), $P=0.026$) [5]. The percentage of cells was lower than that of peritoneal lavage fluid in patients without ascites, while CD16+CD56 dim NK cells increased [6.8% (2.8%, 15.7%) compared with 2.6% (1.6%, 4.3%), $P=0.008$], compared with patients with ascites volume <1000 ml, CD16 CD56 bright NK cells increased [3.1% (1.2%, 3.9%) compared with 0.8% (0.4%, 2.3%), $P=0.002$] in patients with ascites volume ≥ 1000 ml, Age is positively correlated with the level of CD4+T cells in ascites ($r=0.332$, $P=0.021$) and the ratio of CD4+T/CD8+T ($r=0.379$, $P=0.008$) [5]. The formation of ascites in newly treated HGSOC patients will affect the composition of lymphocytes in the peritoneal microenvironment, which is correlated with the patient's age, cancer progression and therapeutic efficacy [5]. Various benign and malignant tumors of the ovary are also common causes of ascites [13]. The morphology of ascites liquid-based cytology combined with patients' special CT manifestations and abnormally elevated levels of CA-125 and HE4 in serum can improve the accuracy of diagnosis of epithelial ovarian cancer [22].

Some benign and malignant gastric diseases can induce ascites, because the incidence of ascites induced by gastric diseases is low, it is easy to be ignored or confused, to make clear the diagnosis of ascites induced by gastric diseases, doctors need to improve their understanding of ascites induced by gastric diseases, ask patients' medical history in detail, carefully improve relevant examinations, eliminate other diseases, and reduce misdiagnosis and missed diagnosis of related diseases [7]. The rate of poorly differentiated adenocarcinoma cells in ascites was 43.75%, and most of the lesions were located in the antral angle; Lymphocytes accounted for 42.5% The poorly differentiated adenocarcinoma cells have small cell bodies, lace like protrusions, less cytoplasm, uneven staining, large nuclei, rough and uneven nuclear chromatin, clear nucleoli, which are distributed in a single, scattered, or clustered distribution, such as fenestrated, palisade, mosaic, etc. [10]. The poorly differentiated adenocarcinoma cells are common in the ascites of gastric cancer patients, with atypical morphology and easy to be mistaken Correct identification of poorly differentiated adenocarcinoma cells in ascites of gastric cancer patients has important value for clinical diagnosis and treatment [10].

The middle-aged female patient, with ascites as the first clinical manifestation, underwent liver biopsy, portal vein pressure measurement, bone marrow puncture, immunofixation electrophoresis and other series of examinations after admission to exclude ascites caused by hepatogenic, nephrogenic, cardiogenic, neoplastic, rheumatic and other diseases, finally, combined with the patient's previous performance, biochemical examination and other indicators, she was diagnosed as POEMS syndrome [8]. POEMS syndrome is a rare plasma cell disease, ascites is one of its common clinical manifestations, and variant POEMS syndrome is rarer; the patient had a large amount of ascites for more than 2 years, the cause of which was unknown [11]. Skin hemangioma provided the basis for the final diagnosis, and finally it was definitely diagnosed as variant POEMS syndrome, which was a rare cause of ascites, because of its atypical symptoms, it was easy to be ignored in clinical practice and delayed diagnosis and treatment, now we report its multidisciplinary diagnosis and treatment process for clinical reference [11].

The incidence of ascites caused by thyroid diseases is low, and it is easy to be ignored in clinical practice, leading to misdiagnosis or missed diagnosis, therefore, it is necessary to understand the relationship between thyroid diseases and ascites, when there is ascites of unknown cause, it is necessary to consider thyroid diseases, improve relevant examinations, and make clear the diagnosis at an early stage, ascites and thyroid diseases, that is, diseases caused by abnormal thyroid hormone levels (such as hypothyroidism and hyperthyroidism) for diseases caused by thyroid cells themselves (such as thyroid cancer) and diseases caused by thyroid influence or heterotopia to other organs (such as struma ovaries and autoimmune diseases), when ascites of unknown cause occurs, thyroid diseases should be considered [9].

Pseudomyxoma peritonei (PMP) is rare in the hepatology department, it has a history of chronic hepatitis B, its clinical manifestations are fatigue, anorexia, pain in the right lower abdomen, abdominal distension, and nausea [12]. It will be misdiagnosed as hepatitis B cirrhosis with ascites in the decompensated period, later, it is confirmed by surgery to be PMP caused by low-grade mucinous tumors of the appendix, suggesting that hepatologists should improve their understanding of the disease and reduce misdiagnosis [12].

Risk factors of spontaneous bacterial peritonitis (SBP) in patients with sclerotic ascites, a new model was established to predict the occurrence of SBP [14].

Cyclosporidiosis is a kind of intestinal parasitic disease. The human body is infected by ingesting water and food contaminated by cyclosporidiosis oocysts, the ingested oocysts enter the human body by invading the epithelial cells of the small intestine, especially the jejunum, which leads to the clinical manifestations of chronic enteritis, the patient's main manifestation is ascites, the results of blood, ascites and bone marrow examinations indicate that the level of eosinophils is significantly increased, it was proposed to be diagnosed as "eosinophilic gastroenteritis", after glucocorticoid treatment, the patient's abdominal distension symptoms improved for a time, but ascites reappeared 3 months after drug withdrawal, finally, the diagnosis of cyclosporidiosis oocysts was found under the light microscope through intestinal mucosal pathology and direct stool smears, the patient was cured by taking compound sulfamethoxazole [15].

Eosinophilic gastroenteritis (EGE) is an inflammatory disease of gastrointestinal tract in children and adults, which is characterized by eosinophils (EOS) infiltration in gastrointestinal tract although EGE is considered to be a rare disease, with the prevalence of other allergic diseases, the number of reported cases is also increasing, it is reported that the number of confirmed cases of EGE in tertiary referral centers in the United States is also increasing [1-2], at present, there is no relevant epidemiological data in China [18]. According to the literature at home and abroad in recent 10 years, reports of eosinophilic gastroenteritis with ascites and pleural effusion are rare [18]. The children with serous eosinophilic gastroenteritis (EG) mainly show a large amount of ascites as the first clinical manifestation, and the eosinophils in the peripheral blood are significantly increased, the diagnosis depends on pathological examination under endoscope, dietary therapy combined with hormone therapy has a significant effect [53].

Pancreatic ascites caused by acute pancreatitis, chronic pancreatitis, pancreatic cancer and other pancreatic diseases is relatively rare and difficult to diagnose and treat, it is very important to carry out multi-disciplinary joint diagnosis and

treatment in the early stage, the formation mechanism of pancreatic ascites caused by different diseases is different and not completely clear, at present, it is necessary to combine ascites examination, imaging examination, endoscopic examination and other comprehensive measures for diagnosis and differential diagnosis, and implement internal medicine Comprehensive individualized treatment of endoscopy and surgery [19].

Hepatogenic ascites is a common and important clinical problem. With the development of liquid biopsy, the second-generation sequencing technology and other methods, as well as the use of new diuretics, ascites drainage pump, transjugular intrahepatic portosystemic shunt and other treatment methods, the research on hepatogenic ascites from mechanism to treatment has made rapid progress, this article summarizes the generation mechanism of hepatogenic ascites and the diagnostic value of ascites on liver diseases, the clinical key points such as low salt diet for hepatogenic ascites, the use of diuretics, and the new concept of treatment of refractory ascites were reviewed [20].

Turbot (*Scophthalmus maximus*) is an important economic fish for aquaculture in the northern coastal areas of China, and has played an important role in the rapid economic development of the northern coastal areas, however, with the large-scale and intensive development of aquaculture, the disease problem of turbot has become one of the major bottlenecks in the sustainable development of the industry [24]. The ascites disease of turbot, its clinical symptoms, pathogens and pathogenic conditions, combined with the status of aquaculture, it is suggested that comprehensive preventive measures such as immunization should be taken in actual production, and the combination of western medicine should be selected for symptomatic treatment once the disease occurs, which can provide reference for epidemiological research, early warning and prevention of turbot ascites disease [24].

Congenital chylous ascites is a rare disease in infants and young children, with milky ascites as a prominent feature, however, due to the lack of relevant reports and research, the lack of standardized diagnostic and treatment standards, and the lack of awareness of clinical practitioners, the children cannot be treated in a timely and effective manner, which not only causes the course of the disease to be prolonged, but also brings great concern and trouble to parents and children, and can cause death to children in serious cases [47]. Combined with existing literature, to systematically summarize the causes, clinical manifestations, diagnosis and treatment of congenital chylous ascites, provide clinicians with a sound basis for the treatment of congenital chylous ascites, and provide suggestions for the diagnosis and treatment of refractory chylous ascites, so as to promote the early recovery of children [47].

The ascites reinfusion reuses self-albumin, reduces the use of exogenous albumin, reduces the economic burden of patients, avoids the immune reaction caused by the use of exogenous blood products, and reduces the chance of infection Ascites reinfusion may be a safe, effective, economical and practical method for the treatment of severe ovarian hyperstimulation syndrome (OHSS) [54].

DISCUSSIONS

The application of albumin in patients with cirrhosis ascites is mainly to prevent circulatory dysfunction after abdominal puncture, prevent renal dysfunction in patients with spontaneous peritonitis, and treat hepatorenal syndrome, recent studies have found that long-term albumin treatment can reduce the incidence of complications in patients with cirrhosis ascites and improve the overall prognosis, which brings new thinking on the clinical application of albumin, combined with the current clinical studies on the long-term use of albumin in patients with liver cirrhosis and ascites, this article aims to provide evidence based basis for the domestic clinical studies on long-term use of albumin [2].

Modified transjugular intrahepatic portosystemic shunt (TIPS) is safe and effective in the treatment of patients with intractable ascites caused by Budd Chiari syndrome (BCS), and can achieve good mid-term and long-term effects [3]. TIPS is used to treat persistent ascites related to hepatic sinus obstruction syndrome (PA-HSOS) or decompensated cirrhosis, although the former has worse preoperative liver function and portal vein hemodynamics, the postoperative survival of PA-HSOS patients is not inferior to that of decompensated cirrhosis patients [34].

ALBI-PMN-PCT combined model has high predictive value for SBP in patients with cirrhosis ascites [14].

Fuganchun No. 3 Formula (FGC-3) can significantly reduce the level of serum vasoactive substances (NO, ET-1) in cirrhotic ascites rats, improve liver function, and up regulate the expression of aquaporin AQP8 in the liver of cirrhotic ascites rats, which may be the mechanism of its effective treatment of cirrhotic ascites [33].

The ascites/serum CEA ratio (F/S CEA), the ratio of neutrophils to lymphocytes (NLR), and the ratio of platelets to lymphocytes (PLR) are valuable biological indicators for differentiating benign and malignant ascites, the combined detection of the three indicators can improve the diagnostic efficiency of malignant ascites [29].

The method of nourishing yin and dispersing knots combined with teicoplanin can safely and effectively reduce the inflammatory reaction of patients with liver cirrhosis and intractable ascites abdominal infection, improve liver function and clinical symptoms, and inhibit the process of liver fibrosis [16].

Tovaptan treatment for perioperative patients with liver cirrhosis can effectively control ascites, promote urine production, facilitate rapid recovery, and improve hyponatremia without affecting blood potassium concentration, with high safety [17].

Based on the theory of "strengthening the foundation and opening channels" of traditional Chinese medicine, the syndrome differentiation diet group can effectively reduce the TCM syndrome score of patients with liver cirrhosis and ascites, improve the symptoms, and enhance the efficacy, which is worthy of clinical promotion and application [21].

Liver cirrhosis ascites belongs to the category of "distension" in traditional Chinese medicine, lifting the pot and uncovering the lid is one of the commonly used therapeutic methods in traditional Chinese medicine for the treatment of water metabolic diseases, the core of liver cirrhosis ascites is the adverse qi mechanism, and the essence of lifting the pot and uncovering the lid is to treat the lung and regulate the qi mechanism [70]. Therefore, treating liver hardening ascites by treating the lung and regulating the qi mechanism can provide new ideas for clinical diagnosis and treatment, at the same time, combining ancient books and modern physicians' understanding, it is proposed that lifting the pot and uncovering the lid includes promoting the lung and promoting the water, eliminating the lung and expelling the water, the three methods of reinforcing the lung and promoting water circulation are: the method of promoting the lung and promoting water circulation takes Yuemaitang as the representative prescription, the method of eliminating the lung and expelling water takes Tingli Dazao Xiefei Decoction as the representative prescription, and the method of reinforcing the lung and promoting water circulation takes Fangji Huangqi Decoction as the representative prescription, finally, taking a proven case as an example, the practical application of the method of lifting the teapot and uncovering the lid in this disease was elaborated to deepen the understanding of the method of lifting the teapot and uncovering the lid [70].

The combination of Jianpihuoxue Lishui Recipe and western medicine has a synergistic effect on the treatment of patients with ascites due to liver cirrhosis of hepatitis B with the syndrome of stopping water due to spleen deficiency, which can improve the clinical symptoms of patients, regulate the liver function and immune function, improve the clinical efficacy, and has high safety, which is worthy of further promotion in clinical practice [52].

Compared with the simple western medicine treatment, the method of supplementing qi, activating blood and promoting diuresis combined with western medicine treatment can significantly improve the curative effect of ascites due to cirrhosis, improve the liver function of patients, reduce recurrence, and will not increase adverse reactions [48].

Cirrhotic ascites is a common terminal complication of chronic progressive diffuse liver disease, the 1-year mortality rate is 15%, and the 5-year mortality rate is as high as 44%, it is called "bulging" and "water insect" in traditional Chinese medicine "Spiritual Pivot - Water Swelling": "How about bulging? Qi Bo said:" abdominal distension, which is big, is as big as skin distension, it is pale yellow, and the abdominal muscles rise [44]. "The clinical manifestations are mainly characterized by abdominal distension like a drum, exposed blue tendons on the abdominal wall, fatigue and anorexia, and low urine [44]. In clinical treatment, more people advocate the combination of traditional Chinese and western medicine, Traditional Chinese medicine believes that the spleen and soil are strong, and water are controlled, at the same time of promoting water and moisture infiltration, the spleen and stomach are strengthened, so that the evil can be removed without harming the right, and remarkable effects can be achieved [44].

Multiple thickening of the intestinal wall of the whole small intestine and multiple enlargements of the abdominal cavity and retroperitoneal lymph nodes were found, after general surgical consultation, it was found that the small intestine had obvious edema with ascites [23]. Since enteroscopy and biopsy could not be done, the method of abdominal puncture was used to extract ascites and send it for pathological examination to identify the pathological nature [23].

The therapeutic effect of Lishui Ruangan Decoction, traditional Chinese medicine umbilical cord application and warm acupuncture on patients with liver cirrhosis ascites of hepatitis B is good, which can significantly improve the liver function of patients, reduce ascites volume, increase 24-hour urine volume, and then reduce abdominal circumference and weight, and significantly improve portal vein system hemodynamics [27].

Jialing Decoction can significantly improve the level of serum inflammatory cytokines in patients with liver cirrhosis ascites of qi yin deficiency type, and has significant clinical therapeutic effect, which is worth popularizing [42].

The self-made Wenyang Lishui decoction combined with conventional western medicine has a good effect in the treatment of ascites due to liver cirrhosis of spleen kidney yang deficiency type, which can significantly improve the ascites symptoms and liver function of patients [37].

Yangyin Lishui Recipe combined with ascites albumin infusion can reduce the blood flow of liver and spleen veins, increase urine volume, and reduce ascites volume in patients with liver cirrhosis and obstinate ascites, with a definite effect [60].

Compound Sophora flavescens injection combined with cisplatin intraperitoneal injection can improve the quality of life of patients with liver cancer complicated with bloody ascites, and reduce the adverse reaction of chemotherapy, which is worthy of clinical promotion [45].

Diversified nursing intervention based on syndrome differentiation of traditional Chinese medicine has a positive impact on the treatment of patients with liver cirrhosis ascites, and can improve the quality of life of patients with liver cirrhosis [55].

The TCM syndrome types of liver cirrhosis ascites mainly include Qi stagnation and dampness, liver and spleen blood stasis, spleen and kidney yang deficiency, accumulation of damp and heat, cold and dampness trapping spleen, etc.; the main therapeutic methods of navel application of traditional Chinese medicine in treating ascites due to liver cirrhosis are: draining water and drinking, simultaneously promoting qi, promoting blood circulation, warming yang, and removing dampness [35]. The highest frequency of application is kansui Conclusion: the distribution of liver cirrhosis ascites syndrome types is mainly based on the deficiency of the origin and the excess of the symptoms, and the treatment method is mainly to remove the symptoms and simultaneously treat the deficiency of the origin, the umbilical cord application therapy is obviously core oriented, with the drugs for promoting blood circulation, regulating qi and warming yang as the main drugs [35].

Routine western medicine combined with Rougan Huaxian granules can help ascites elimination and diuresis in patients with ascites due to hepatitis B cirrhosis, improve the clinical efficacy and quality of life of patients, and reduce the degree of liver fibrosis and the level of oxidative stress [28].

The 2021 American Society of Hepatology Practice Guidance: Diagnosis, Evaluation and Management of Ascites and Hepatorenal Syndrome is an update of the 2012 American Society of Hepatology (AASLD) Guidelines for the Diagnosis, Evaluation and Management of Ascites and Hepatorenal Syndrome in Patients with Chronic Liver Disease Different from the guidelines formulated by formal rating based on literature systematic evaluation, evidence quality and recommendation strength, given the lack of sufficient randomized controlled trials to support meaningful systematic evaluation and meta-analysis, the practice guidance is to put forward a guiding statement and recommendations under the supervision of the AASLD Practice Guidance Committee, based on the consensus of the expert group and the systematic review and analysis of relevant literature [101].

Up to now, the clinical treatment of liver abscess combined with a large amount of pleural and ascites and electrolyte disorder is quite difficult, this article introduces the treatment of TCM from the lung, the syndrome differentiation is phlegm heat obstructing the lung and spleen deficiency stopping the water, the treatment is to clear the lung and remove phlegm, expel the lung and lower the qi, dredge the waterways, strengthen the spleen and replenish the qi and promote the water, the effect is remarkable [39].

Serum cytokeratin 18 (CK18), fibroblast growth factor 21 (FGF-21) and their expression levels in patients with cirrhosis and ascites are closely related to esophageal varices (EV) bleeding and liver function grading [40].

The intraperitoneal administration of bevacizumab combined with cisplatin in the treatment of gastric cancer ascites can effectively alleviate its progress, and the effect is reliable [72].

The combination of cetuximab and platinum drugs in the treatment of malignant ascites caused by gastric cancer has significant effect, reduces the expression of vascular endothelial growth factor (VEGF) and tumor markers, improves the quality of life of patients, and has high safety, which is worthy of clinical promotion [46].

The application of psychological stress relief intervention combined with enhanced health education in patients with liver cirrhosis and ascites can improve their knowledge mastery, reduce their sense of disease uncertainty, enhance their psychological resilience, and thus improve their quality of life [50].

The combination of artificial pleural effusion and ascites with microwave ablation for liver cancer has high ablation rate, fewer complications, and is more effective and safer [51].

The combination of Lishui Xiaogu Formula and external treatment of traditional Chinese medicine can significantly improve the treatment effect of refractory ascites due to liver cirrhosis after hepatitis B. It is convenient for clinical application and easy for patients to accept. It is worthy of clinical promotion and application [49].

Tovaptan can effectively correct hyponatremia in cirrhotic patients with ascites, increase urine volume, reduce ascites volume, and has good tolerance without serious adverse reactions [71].

Compared with cancerous ascites and leaky ascites, interleukin-27 (IL-27) γ Interferon (IFN- γ) The levels of adenosine deaminase (ADA) and adenosine deaminase (ADA) increased significantly in tuberculous ascites (TPE), and the combined detection of the three has good identification value for TPE, and has broad application prospects [73].

CONCLUSIONS

Malignant ascites is one of the common secondary diseases of advanced malignant tumors, its prognosis is poor, the average survival period is short, and there is a lack of effective therapeutic drugs, which seriously affects the quality of life of patients [30]. At the same time, it also interferes with the smooth implementation and effect of systemic chemotherapy, at present, local treatment has become the main means to control malignant ascites the intraperitoneal perfusion of cytotoxic drugs, targeted drugs, biological response regulators and the application of intraperitoneal hyperthermic perfusion chemotherapy, pressurized intraperitoneal aerosol chemotherapy and other new technologies not only improve the short-term efficacy and quality of life of patients, but also provide new ideas for the treatment of malignant ascites as the focus of oncologists, we look forward to the emergence of more effective intraperitoneal perfusion drugs for malignant ascites in the future [30].

Wound malunion is one of the common postoperative complications of surgical patients with liver cirrhosis and a large number of ascites, the rise of intra-abdominal pressure, the occurrence of spontaneous peritonitis and continuous ascites leakage pose a serious challenge for surgeons to deal with postoperative wound malunion Vacuum sealing drainage (VSD) is a new drainage method initiated by Fleis chmann and others in Germany, it refers to promoting wound healing by covering and sealing the wound with special materials and placing it under negative pressure for a period of time, this study reports the efficacy of VSD in treating patients with ascites leakage after liver cirrhosis from November 2015 to October 2019 in our hospital [32].

Cirrhotic ascites is characterized by positive asthenia as the basis and evil excess as the standard. The stagnation of liver qi leads to spleen asthenia, if the spleen asthenia cannot be transported, the water dampness stops gathering and forms ascites, the blocking of the middle energizer by the evil heat of dampness further aggravates the stagnation of liver qi and spleen asthenia, the liver and kidney are of the same origin and affect the kidney for a long time, eventually leading to the damage of the liver, spleen and kidney and the loss of the three energizers. Huang Feng followed the idea of combining disease differentiation with syndrome differentiation, advocated starting from the root of liver, spleen and kidney, supplemented by promoting qi, promoting water, clearing heat and promoting blood circulation to treat symptoms, adopted the methods of warming the kidney and spleen, promoting lung and liver, clearing heat and removing dampness, promoting blood circulation to remove blood stasis and unblocking collaterals, and paid attention to the treatment principle of opening the upper focus to dredge lung qi, smoothing the middle focus to help transport, and adjusting the lower focus to promote water and dampness, and judged the curative effect by combining the symptoms, signs of patients and relevant examinations of western medicine [31].

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