

**Conclusion:**

Treatment of disc herniation with medical ozone had curative effect, the anular disruption of non-prominent type had the best efficacy, the result of anular disruption prominent type is good, and the fibrous ring of non-ruptured non-prominent type is better, but fibrous ring of non-ruptured prominent type had bad effect. There had no significant difference between male and female. Its mechanism is effective to reduce the aseptic inflammation and edema response of nerve root and spinal dural, relieve clinical symptom, but the effect on reducing disc hernia is limited.

Keywords: ozone treatment, disc disease, anular disruption, fibrous ring of non-ruptured, clinical evaluation



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**Clinical evaluation of sequential medical ozone therapy for the Primary liver cancer patients after trans-arterial chemoembolization**

Liu Qing, He Xiaofeng.

The Department of interventional therapy,

Nanfang Hospital, Southern Medical University

**ABSTRACT****[Background]**

Primary liver cancer including intrahepatic bile duct cells and hepatocellular carcinoma was the most common malignant tumor in the clinic. It's characteristic was the high degree of malignancy, the it can occur at any age, but more common in 40-50 years. The ratio of male to female ratio is 2-5:1. Most already advanced patients when surgical resection is low, and high recurrence rate. Therefore, the majority of hepatocellular carcinoma require effective and non-surgical approaches for treatment.

Interventional treatment has been used as the preferred treatment to Unresectable advanced hepatocellular carcinoma patients. At present, the interventional treatment of primary liver cancer has grown from a single technology and methods into a variety of methods simultaneously, treating the symptoms of a more complete system and integrated treatment. In paper, transcatheter hepatic arterial chemoembolization is one of the most common methods in the interventional treatment of liver cancer. Majority It will occur in patients with liver dysfunction mainly in the decreased serum albumin, serum transaminases and alkaline phosphatase levels of the compensatory mechanisms of the normal liver tissue, who with hepatocellular carcinoma after interventional therapy; a improved, But restored to the preoperative level after 5-7 days. Some experts believe that part of the liver cancer chemoembolization caused by acute and chronic liver injury is difficult to restore.

Some patients repeatedly involved in the treatment can lead to cirrhosis of liver function damage. Generally in our country patients with hepatocellular carcinoma accompanied by hepatitis and cirrhosis of the liver, The damage is not easy to restore after the interventional treatment, and can even lead to the occurrence of hepatic encephalopathy and liver failure; intervention in patients found in clinical diagnosis and treatment of liver cancer after death from many is not the cancer itself, but due to

depletion of liver function; Due to multiple factors of the tumor, surgery, psychology, quality of life in patients with tumor survival, autoimmunity and regulatory function of the lower; the treatment of patients with liver function failure is limited, there is no effective reversal measures. often too much medication to poor liver itself functions to withstand the pressure of drug metabolism increase, but may further damage the risk of liver function. How to slow liver cancer involved in the damage of liver function, relieve postoperative clinical symptoms, improve patients' quality of life is still an important clinical issue.

In the 1980s, ozone blood therapy has been the beginning as an auxiliary method of treatment of malignant tumors, studies have shown that medical ozone can increase the body's immune function, enhance chemotherapy efficacy and reduce toxicity of chemotherapy drugs in the prevention and treatment of viral hepatitis .Some scholars use the method of blood transfusion and rectal gas injection of medical ozone related clinical and basic research. medical ozone have a positive effect in preventing liver function damage, enhancing and regulating the immune delay liver fibrosis. Based on the medical use of ozone has been a clinical research, the liver disfunction,the organism immune damage, reducing the quality of life, and the decline of many of the problems after the interventions for liver cance, and explore the place of medical ozone application to intervene in the development of liver cancer after surgery, the treatment for observation of their chemotherapy reduce postoperative pulmonary embolism response, protecting the liver functions, to improve the quality of life in terms of their impact, and prove its ability to intervene in the treatment of liver cancer.

#### **[Objective]**

Observed ozone treatment of primary liver cancer interventional postoperative clinical efficacy; explore the advantages and mechanisms of the efficacy of ozone treatment of the disease; provide new ideas for ozone clinical diagnosis and treatment of liver cancer.

#### **[Material and Method]**

1, the selected cases were from the South Hospital from May 2011 to October 2011, a total of 40 cases of primary liver cancer patients. 35 males and 5 females. The average age of 54. 18 cases of liver function in patients with child classification of a level, 22 cases of b level; tumor markers (afp) were abnormal; blood had no obvious abnormalities.

2, Experimental groups and treatment processing: 40 cases of liver cancer patients were randomly divided into experimental and control groups, the experimental group after interventional therapy plus medical ozone rectal infusion therapy; the control group only received conventional tumor intervention surgery. Medical ozone prepared through three oxygen generator, medical oxygen experimental ozone concentration of 40ug/ml. Perfusion methods as: medical ozone gas 150ml slowly through the anus into the rectum with thin conductive air hose, not exhausting to retain 10min, Once a day, 5-7 days in a row.

3, Statistical analysis: liver cancer patients met the diagnostic criteria for a total of 40 cases, the use of 1:1 by age, gender balanced random into groups, using the double entry method entered into the database, patients with surgery, postoperative liver function indicators, indicators of tumor markers (afp) patients before and after points of quality of life, physical condition scores were recorded and used for statistical analysis sas9.1.3. Before and after the measurement data: repeated measure analysis of variance; disorder classified information: the chi-square test; orderly classification data: Wilcoxon test was used; selected test standard of  $\alpha = 0.05$ ;  $p < 0.05$  indicated a significant difference,  $p > 0.05$  indicates no significant difference.



**[Result]**

Two groups of patients in the group stage, age, gender, disease treatment before former KPS points, no significant differences between the quality of life ( $P > 0.05$ ). According to the evaluation of clinical effect of standards, through repeated measures analysis of variance, physical condition comparison of scoring points, no significant differences between the experimental and control groups ( $P = 0.1478$ ), before and after treatment of a significant difference between two points in time ( $P < 0.0001$ ), there are interactions between two factors ( $P < 0.0001$ ), analysis of the separate effects of the group, Experimental group of KPS integral average rise 7.55 after treatment than before treatment, control group KPS points after treatment than before treatment with an average rise of 0.3, notes treated in KPS group effect on the index than the control group. Experimental group improved physical status score comparison 1 (5%), stability of 19 cases (95%), controlled stability of 20 cases, and there is no improvement and deterioration; the rank sum test,  $=1, P = 0.3173$ , can't believe that there are differences between the two treatments. Quality of life scores effective 5 cases of clinical experimental group (25%), stable 15 cases (75%), the control group effective 1 (5%), stability of 19 cases (95%), the rank sum test,  $=3.0588, P = 0.0803$ , no significant differences between the two groups. Life quality scoring integral comparison, experimental group and control group Zhijian differences no significantly sexual ( $P = 0.1499$ ), treatment before and after two time points Zhijian differences has significantly sexual ( $P < 0.0001$ ), two factors Zhijian exists interactive role ( $P = 0.0064$ ), should analysis all group of separate effect, experimental group scoring treatment Hou than treatment Qian average rise 4.6, control group treatment Hou than treatment Qian average rise 1.5, description experimental group in index Shang effect better than control group. AST, ALT, GGT three indicators no significant differences between the control group and the experimental group ( $P > 0.05$ ), and there are differences between two points in time before and after treatment ( $p < 0.05$ ), two factors zhijian exists interactive role ( $P < 0.05$ ), should analysis all group of separate effect, experimental group three a index in treatment hou reduced degree average level are than control group, description experimental group in this three a index shang effect better than control group. TB, and DB, and AFP three a index experimental group and control group zhijian no significantly sexual differences ( $P > 0.05$ ), treatment before and after and two time points Zhijian has differences ( $P < 0.05$ ), two factors zhijian no interactive role ( $P > 0.05$ ), Description the experimental group and the control group in these three indicators are on curative effect and no significant difference between the effect. ALB, ALP, the two indicators no significant differences between the control group and the experimental group ( $P > 0.05$ ), before and after treatment with no significant differences between two points in time ( $P > 0.05$ ), no interaction between the two factors ( $P > 0.05$ ), in the experimental group and the control group the two indicators have no significant effect on.

**[Conclusion]**

Primary liver cancer after intervention combined with medical ozone treatment can improve patients' physical condition and quality of life in the efficacy score, and be more effective in reducing the content of aspartate and alanine and valley GGT, and protect liver function; This shows that medical ozone combined interventional treatment of primary liver cancer, which can play a sum of synergy, and have a good effect to attenuate efficiency, protect the liver function and improve the body's quality of life. So further confirmed the usefulness of medical ozone is objective and rational, The treatment is worthy of further clinical application and promotion.

Key words: primary liver cancer; intervention; medical ozone; liver function; quality of life;

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