Análisis clínico de octreotida en el tratamiento de la cirrosis hepática con hemorragia gastrointestinal superior

Clinical Analysis of Octreotide in the Treatment of Liver Cirrhosis with Upper Gastrointestinal Hemorrhage

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Resumen
Este artículo estudia el efecto clínico de octreotida en el tratamiento de la cirrosis con hemorragia digestiva alta. Un total de 90 pacientes con cirrosis y hemorragia digestiva alta tratados en nuestro hospital desde enero de 2016 hasta enero de 2018 se dividieron aleatoriamente en dos grupos: el grupo de observación y el grupo de control, con 45 casos en cada grupo. El grupo de control se trató con pituitrina y el grupo de observación se trató con octreotida. Se compararon el tiempo de hemostasia, el efecto del tratamiento y la tasa de reacción adversa de los dos grupos. En el grupo de observación, 30 pacientes con hemostasia en 24 ± 1.0 horas, 9 pacientes con hemostasia en 72 ± 2.0 horas, 4 pacientes con hemostasia después de 72 horas y 2 pacientes sin hemostasia fueron significativamente mejores que aquellos en el grupo control (P < 0.05); en el grupo de observación, 43 (95.56) pacientes con tasa efectiva fueron significativamente más altos que aquellos en el grupo control (P <0.05); en el grupo de observación, 4 (8.89) pacientes con reacciones adversas fueron significativamente más bajos que los del grupo control (P <0.05). La diferencia fue estadísticamente significativa. En el tratamiento de pacientes con cirrosis hepática y hemorragia digestiva alta, octreotida tiene un efecto significativo. Los pacientes tienen una hemostasia más rápida, una mayor eficacia del tratamiento, una tasa de reacción adversa más baja, mejoran significativamente la tasa de hemostasia y reducen la tasa de mortalidad. Vale la pena popularizar y aplicar clínicamente.

Palabras clave: cirrosis; Hemorragia gastrointestinal superior; Octreotide; Cirrosis hepática

Abstract
This paper study the clinical effect of octreotide in the treatment of cirrhosis with upper gastrointestinal hemorrhage. A total of 90 patients with cirrhosis and upper gastrointestinal hemorrhage treated in our hospital from January 2016 to January 2018 were randomly divided into two groups: the observation group and the control group, with 45 cases in each group. The control group was treated with pituitrin and the observation group was treated with octreotide. The hemostasis time, treatment effect and adverse reaction rate of the two groups were compared. In the observation group, 30 patients with hemostasis within 24 ± 1.0 hours, 9 patients with hemostasis within 72 ± 2.0 hours, 4 patients with hemostasis after 72 hours, and 2 patients without hemostasis were significantly better than those in the control group (P < 0.05); in the observation group, 43 (95.56) patients with effective rate were significantly higher than those in the control group (P < 0.05); in the observation group, 4 (8.89) patients with adverse reactions were significantly lower than those in the control group (P < 0.05). The difference was statistically significant. In the treatment of liver cirrhosis and upper gastrointestinal bleeding patients, octreotide has significant effect. The patients have faster hemostasis, higher treatment efficiency, lower adverse reaction rate, significantly improve the hemostasis rate and reduce the mortality rate. It is worth popularizing and applying clinically.

Key words: Cirrhosis; Upper gastrointestinal hemorrhage; Octreotide; Liver cirrhosis

1. Introduction

Clinically, liver cirrhosis is a common chronic progressive liver disease. Because of repeated effects and long-term effects of different etiologies, diffuse liver injury occurs. The patients’ early on-the-spot manifestations include hepatitis, late portal hypertension and liver function damage. It is easy to cause multiple systems of human body to be affected and more complications, such as primary liver cancer and spontaneous peritoneum. Inflammation and upper gastrointestinal hemorrhage, among which the most common complication
is upper gastrointestinal hemorrhage, which can lead to hepatic encephalopathy and hemorrhagic shock in patients, posing a great threat to the life safety of patients [1-2]. At the same time, the condition of upper gastrointestinal bleeding is more complex and appears faster. The clinical manifestations of patients are acute peripheral circulatory failure, blood volume reduction, etc., so in the process of treatment, how to deal with bleeding faster is very important. In this study, we discussed the effect of octreotide in the treatment of liver cirrhosis and upper gastrointestinal hemorrhage.

2. Materials and methods

2.1 General information

A total of 90 patients with cirrhosis and upper gastrointestinal hemorrhage treated in our hospital from January 2016 to January 2018 were randomly divided into two groups, the observation group and the control group, each with 45 cases, including 23 males and 22 females in the observation group, aged (41-70), with an average age of (55.58 ± 5.71), a course of (2-6) years, and an average course of (3.54 ± 1.10) years; 24 males and 21 females in the control group. Age (42-71), mean age (55.53 ± 5.66), course of disease (3-6) years, mean course of disease (3.52 ± 1.12) years. There was no significant difference between the two groups in general information (P > 0.05).

2.2 Inclusion exclusion criteria

Inclusion criteria: (1) Liver cirrhosis was confirmed by clinical diagnosis, and gastroscopy was performed for the patient, which was caused by vein rupture of gastric fundus and esophagus; (2) Patients and their families agreed to this study and signed a letter of understanding; (4) This study was approved by the ethics Association.

Exclusion criteria: (1) Infection, mental illness or consciousness disorder; (2) Other digestive tract diseases; (3) Dysfunction of heart, liver and other important organs; (4) Different researchers.

2.3 Method

First of all, two groups of patients were treated with antishock, dilatation, liver protection, blood transfusion, and intravenous omeprazole (GJZ h20056108, produced by Sichuan Kelun Pharmaceutical Co., Ltd.), while the control group was treated with pituitrin, the content of which was 50% by intravenous injection of 10u + 20ml (GJZ h32026637, born by Nanjing Xinbai Pharmaceutical Co., Ltd.). The patients in the observation group were treated with octreotide, 20ml of which was 0.9% glucose + 0.1mg octreotide (GJZ No. h20100114, produced by Beijing Shuanglu Pharmaceutical Co., Ltd.) was injected intravenously. Except for the first injection, the rest were pumped at a rate of 35 μg / h for three days.

2.4 Observation indicators

(1) Hemostasis standard of upper digestive tract: the color of stool changed to golden color, the bleeding disappeared, the bowel sounds disappeared, the pulse returned to normal, the blood pressure was stable, and the hemoglobin did not drop.

(2) Treatment effect standard: the patient stops bleeding within 48 hours, the pulse and blood pressure are stable and there is no sign of bleeding, and all kinds of clinical symptoms recover, indicating significant effect; the patient stops bleeding within 72 hours, the pulse and blood pressure are stable and there is no sign of bleeding, and the number of black stool Meditations is reduced, indicating effective; the patient does not stop bleeding for more than 72 hours, at the same time, all kinds of clinical symptoms are not significantly improved, indicating invalid. Total effective rate + significant effect + effective.

2.5 Statistical analysis

The data of this study was included in spss22.0 software for analysis. The measurement data was expressed in ( x ± s) and passed the t test; the count data was expressed in (%), and passed the chi square test. When p < 0.05, it was statistically significant.

3. Results

3.1 Comparison of average hemostasis time between the two groups

The average hemostasis time of the observation group was (30.54 ± 5.74) h, and that of the control group was (42.64 ± 6.97) h, which was significantly lower than that of the control group (P < 0.05); the difference was statistically significant, as shown in Table 1.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Average hemostasis time (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation group</td>
<td>45</td>
<td>30.54±5.74</td>
</tr>
</tbody>
</table>
3.2 Comparison of the total effective rate of the two groups

In the observation group, 30 patients with hemostasis within (24 ± 1.0) h, (9 patients with hemostasis within 72 ± 2.0) h, 4 patients with hemostasis after 72 h, 2 patients without hemostasis; in the control group, 16 patients with hemostasis within (24 ± 1.0) h, (8 patients with hemostasis within 72 ± 2.0) h, 6 patients with hemostasis after 72 h, 15 patients without hemostasis; in the observation group, the total effective rate was 43 (95.56), and in the control group. The total effective rate of treatment was 30 (66.67) cases, the observation group was significantly higher than the control group (P < 0.05); the difference was statistically significant, see Table 2.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Total effective</th>
<th>Invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation group</td>
<td>45</td>
<td>43 (95.56)</td>
<td>2 (4.44)</td>
</tr>
<tr>
<td>Control group</td>
<td>45</td>
<td>30 (67.67)</td>
<td>15 (33.33)</td>
</tr>
</tbody>
</table>

3.3 Comparison of adverse reactions between the two groups

4 (8.89) patients in the observation group had adverse reactions, including 1 case of palpitation and chest distress, 3 cases of vomiting and nausea, all recovered after continuous injection of octreotide; 13 (28.89) patients in the control group had adverse reactions, including 5 cases of palpitation and chest distress, 8 cases of vomiting and nausea, and the difference was statistically significant (P < 0.05), as shown in Table 3.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Palpitations, chest tightness</th>
<th>Vomiting, nausea</th>
<th>Incidence rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation group</td>
<td>45</td>
<td>1 (2.22)</td>
<td>3 (6.67)</td>
<td>4 (8.89)</td>
</tr>
<tr>
<td>Control group</td>
<td>45</td>
<td>7 (15.56)</td>
<td>11 (24.44)</td>
<td>18 (28.89)</td>
</tr>
</tbody>
</table>

4. Discussion

The common complications in patients with liver cirrhosis include upper gastrointestinal hemorrhage. The patients with such complications are very dangerous, with a large amount of bleeding. The patients are prone to shock, hepatic coma and other conditions, with a high mortality rate. The main pathogenesis is due to the formation of necrosis and regeneration nodules of hepatocytes, liver tissue and connective tissue in the process of liver cirrhosis. The reconstruction and proliferation of the tissue lead to the diversion, distortion and occlusion of the small branches of the hepatic vein and portal vein, the obstruction of the portal vein blood flow, the formation of collateral circulation and the increase of the portal vein pressure [3-4]. According to the related clinical research, the causes of upper gastrointestinal bleeding in patients with cirrhosis are as follows: (1) Patients with peptic ulcer, because of the influence of cirrhosis, are prone to liver function damage, gastric acid, endotoxemia, infection and mucosal microcirculation obstruction, etc., which can cause bleeding in the upper digestive tract; (2) Patients with upper digestive tract bleeding, patients with There is reflux esophagitis, upper gastrointestinal bleeding in patients with cirrhosis may also be affected by ascites due to cirrhosis. The function of lower esophageal sphincter is limited, and esophageal reflux occurs when a large amount of ascites occurs; (3) Varicose esophageal and gastric fundus veins in patients, one day rupture of esophageal and gastric fundus veins leads to upper gastrointestinal bleeding. In the complications of cirrhosis, food The rupture of the varicose vein at the end of the tube and stomach is a common one, which is in a critical condition with a large amount of bleeding. The patients often show sudden massive hematemesis, black stool and tar stool, leading to hepatic encephalopathy or shock [5-6].

In clinical treatment for patients with cirrhosis and upper gastrointestinal bleeding, the common treatment includes pituitrin injection, three chamber balloon compression, ligation, surgery, endoscopic sclerotherapy. Because of other factors, the treatment of upper gastrointestinal bleeding is mainly to inhibit the gastric acid secretion of patients, which has a certain effect. Air bag compression, ligation, surgery, endoscopic sclerotherapy are often not accepted because of the greater trauma to patients, and the same effect as the actual treatment is not good. After treatment, patients are prone to other complications, leading to death of patients,
with low safety [7-8]. Therefore, in the treatment of liver cirrhosis and upper gastrointestinal bleeding, it is very important to stop bleeding as early as possible [9]. It is very important to reduce the portal pressure in the process of maintaining the blood dynamic balance and hemostasis and reducing the liver failure. The common drugs for reducing the portal pressure include pituitrin. Pituitrin has the effect of increasing hypertension and contracting blood vessels. Its hemostasis mechanism is to contract the anterior sphincter of capillaries, arterioles and visceral blood vessels, so as to alleviate the effect caused by visceral blood flow. However, the effective rate of hemostasis is low and the selectivity of the drug is poor. According to the relevant clinical research, it is found that the vasoconstriction of other organs and blood vessels will be caused by the use of pituitrin, which will reduce the amount of blood flow back to the heart, resulting in the discomfort of the patient's heart. At the same time, there are many adverse reactions after the use of the drug, which will gradually not be made in clinical practice. Use [10]. Octreotide is a synthetic natural somatostatin, which belongs to octreotide derivative. It has similar pharmacological effect with somatostatin, and its duration is longer. Its half-life is 30 times longer than other natural auxin, and it has many different physiological activities. (1) It can reduce portal pressure, increase intestinal absorption of sodium, water and intestinal emergence. Excessive secretion; (2) Decrease secretion of pancreas, cholecystokinin and trypsin secretion, gallbladder emptying and gastric motility, and directly protect the parenchymal cell membrane of pancreas; (3) Inhibit insulin, glucagon, pancreatic acid and gastric acid; (4) Promote thyroxine and inhibit growth hormone [11-14]. In clinical, octreotide is often used in the treatment of liver cirrhosis and upper gastrointestinal hemorrhage. It is combined with endoscopy. Because of its excellent pharmacological effect, octreotide has obvious effect in clinical treatment. Its treatment mechanism is as follows: (1) It can promote blood clot contraction and platelet aggregation by inhibiting pepsin and gastric acid secretion, aiming at the expansion of glucagon on visceral blood vessels[15]. Antagonize and reduce the influence on gastrointestinal blood, and have no obvious influence on human coronary artery and blood dynamics; (2) By inhibiting the secretion of blood vessel transmitter glucagon in patients, blocking the expansion of blood vessels, contracting visceral blood vessels and blood flow, reducing the blood flow and velocity of portal system, reducing the pressure of portal vein, and achieving the effect of hemostasis; (3) It can directly affect the smooth muscle of the patient's blood vessels, reduce the pressure and tension of the varicose vein wall, significantly reduce the blood flow of the patient's viscera, then the blood flow of the patient's liver, contract the patient's lower venous plexus, increase the pressure of the lower esophageal sphincter, and then reduce the reflux of the gastric contents [16-18]. In this study, the average hemostasis time of the control group treated with Pituitrin was significantly longer than that of the observation group treated with octreotide (P Learn. Treatment with octreotide can effectively stop bleeding, inhibit the secretion of excessive gastric acid, protect the gastric mucosa, protect the liver and stomach functions, effectively inhibit the deterioration of liver function, reduce the occurrence of hepatorenal syndrome and other conditions, selectively reduce blood pressure for the portal vein, have significant hemostasis effect, and have less side effects.

5. Conclusion

In conclusion, octreotide has a significant effect in the treatment of liver cirrhosis and upper gastrointestinal bleeding. The patients have faster hemostasis, higher treatment efficiency, lower adverse reaction rate, significantly improve the hemostasis rate and reduce the mortality of patients. It is worth popularizing and applying clinically.

Acknowledgement


References


