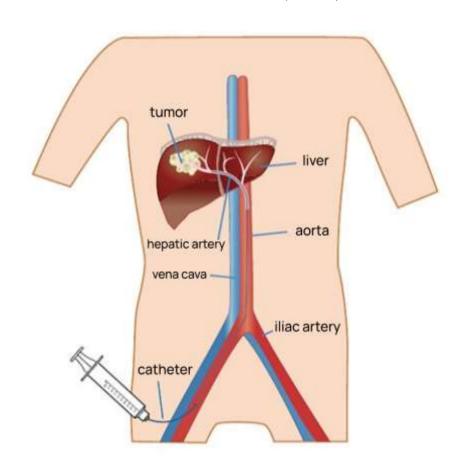
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Introduction Transcatheter Arterial Embolization(TAE)



To deliver intelligent and holistic medicine and to provide the best healthcare Compassion Quality Innovation Accountability

All information above has been reviewed by Gastroenterology specialists

Edited and published by the Department of Nursing,

Taichung Veterans General Hospital

A. Introduction:

The current treatment methods for liver cancer can be divided into surgical resection, radiofrequency ablation of tumor and hepatic artery embolization. Physicians recommend that you receive hepatic artery embolization for your current condition. We will introduce you to the methods and precautions for the treatment of hepatic artery embolization. I hope to get your cooperation and improve your quality of life.

B. Preparation before treatment:

- (A) The physician will explain to you the purpose, location, method, and possible complications of the treatment, and fill out the treatment consent form.
- (B) Before the treatment, blood tests and shaving of the perineal area and bilateral inguinal are performed to facilitate disinfection and puncture.
- (C) If the platelet count is less than 50,000 or the clotting time (INR) is greater than 1.2, blood transfusion or medication will be administered according to the physician's instructions.

(D) Fasting:

- (a) Morning checke: Do not eat, including water and food from the early morning (00:00) of the treatment.
- (b) Afternoon inspector: After breakfast(06:00), do not eat, including water and food.
- (E) In the morning of the examination, give an intravenous drip and intramuscular injection of antihypertensive medication, analgesics or steroids as necessary.

(F) Before sending the examination, you need to solve the urination and remove the accessories and underwear.

C. The treatment process:

- (A) The service staff will send you to the inspection room of the Department of Radiology by using a bed.
- (B) The skin of the puncture site is disinfected by the physician, usually the right inguinal, and local anesthetic medication and developer are injected for angiography to determine the blood flow, tumor size and distribution of the liver.
- (C) The physician enters the catheter from the blood vessels in the inguinal into the hepatic artery, and injects anticancer drugs and embolic substances near the tumor.
- (D) After the treatment is completed, the physician will remove the catheter, stick it with gauze and tape, and use a sand bag to pressurize the wound at the puncture site.
- (E) During the treatment, please relax and cooperate with the physician's instructions to complete the treatment successfully.

D. The precautions after treatment:

(A) In order to avoid bleeding at the puncture site, the patient should be absolutely bedridden for 12 hours after the examination, and the puncture site of the sand bag should be pressed and the patient should be lying flat for 6 hours. Do not sleep on the pillow, do not raise the head or bend the knee, try to avoid increasing the abdominal pressure. If you use self-funded hemostatic cotton, only pressurize for 3 hours and lay flat for 3 hours, but those with low platelets should be treated

- as appropriate.
- (B) Vital signs will be closely monitored within 4 hours after returning to the ward, with heartbeat, respiration and blood pressure monitored every 15 minutes for the first 2 hours, and every 30 minutes for the last 2 hours.
- (C) Always pay attention to whether the sand bag is displaced or peeled off. If the puncture site has a wet sticky or numb cold feeling, the nurse should be notified immediately.
- (D) If there is no discomfort after the examination, you can start drinking water or eating a small amount of liquid food 2 hours after returning to the ward (if there is no vomiting after half an hour, you can eat normally).
- (E) During the 12 hour bed, do not go to the toilet (can be replaced by a potty or urinpot) to avoid increasing the chance of bleeding.
- (F) After <u>24</u> hours of examination, the nursing staff will slowly remove the gauze and fixing tape of your groin and moisten it with normal saline solution to avoid rash, blisters and even damage to the skin.
- (G) The next day after the examination, blood will be drawn to test the liver function, and the physician will give liver protection drugs as needed.
- (H) If there is blood stasis at the puncture site (inguinal) 72 hours after the examination, the affected area can be applied with a hot towel, about 3 to 4 times a day, each time limited to 15 minutes.
- (I) If symptoms of abdominal pain, nausea, vomiting or fever occur 24-72 hours after the examination, inform your healthcare provider and give analgesics or antiemetic medication as necessary.

E. Notes after discharge:

- (A) Prohibition of drinking alcohol.
- (B) Take a balanced diet, regular quantitative, do not overeating, use fresh, light food, avoid eating processed or pickled foods, such as canned, bacon, salted fish or pickles.
- (C) Maintain a regular life, do not stay up late, and do appropriate exercise according to individual physical strength.
- (D) Do not take over-the-counter medicines, remedies and herbs to avoid increasing the burden on the liver.
- (E) After the examination, some patients may have nausea, vomiting, fever, burning sensation in the upper abdomen, stuffy pain, and blood stasis at the puncture site. This is a common reaction after embolization, usually it will slowly disappear in 7-10 days. If the symptoms are serious, please inform the health care staff and we will do the appropriate treatment for you.

F. Conclusion

After the hepatic artery treatment is completed, nausea, vomiting, fever, and burning sensation in the upper abdomen often occur, which usually improves within 7-10 days. After discharge, maintain a regular life and a balanced diet to avoid increasing the burden on the liver.

G. References

何俊廷、陳倩、傅家駒、蘇建維(2022)·非酒精性脂肪肝病引起之 肝細胞癌:現有及新興治療的安全性及效力·臨床醫學月刊, 89(6),378-388。https://doi.org/10.6666/ClinMed.202206_ 89(6).0059

Sur, B. W., & Sharma, A. (2019). Transarterial chemo-embolization for hepatocellular carcinoma. Journal of Radiology Nursing, 37(2), 107-111. https://doi.org/10.1016/j.jradnu.2017.12.004

Let us take the quiz to make sure you understand
1. After the examination, pay attention to the sandbag to ensure that it
does not shift or fall off. If there is any wetness, stickiness or numbness
or coldness at the puncture site, notify the nurse practitioner
immediately.
□Yes □No □Don't know
2.After the examination, you should be absolutely bedridden for 12 hours
and do not go to the bedside toilet to avoid increasing the chance of
bleeding.
□Yes □No □Don't know
3. After the completion of hepatic artery embolism treatment, you can take
the Chinese medicines introduced by your friends and relatives to take
care of your liver.
□Yes □No □Don't know
4. If there is no discomfort after the examination, you may start to drink
water or eat a small amount of liquid food 2 hours after returning to the
ward (if there is no vomiting after half an hour, you may eat normally).
□Yes □No □Don't know
5. If there is ecchymosis at the puncture site (groin) 72 hours after the
examination, a hot towel can be used to apply warm compresses to the
affected area for up to 15 minutes, about 3 to 4 times a day.

□Yes □No □Don't know