Ultrasound and surgery for gall bladder carcinoma during pregnancy

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Summary

Gall bladder carcinoma is the most common carcinoma of the biliary tract and the fifth most common malignant tumor of the gastrointestinal tract. The patients usually have no symptoms at all or non-specific symptoms are present. The therapy for gall bladder carcinoma is complete removal. Unfortunately, in 80% of the cases the survival period is less than one year.

Key words: Gall bladder; Carcinoma; Pregnancy.

Introduction

Gall bladder carcinoma is the most common carcinoma of the biliary tract and the fifth most common malignant tumor of the gastrointestinal tract. Among all malignant tumors of the digestive tract it is present in 1-3% of cases. Gall bladder carcinoma was found in 0.1-1% of autopsy reports, i.e. 0.2-2% of all gall bladder surgeries, which makes up 4% of all carcinomas found in autopsies [4]. It is the most common among the Japanese population. It is three to four times more frequent in women than in men. Cholelithiasis is present in 70% to 80% of the cases. This association points to the possible role of chronic inflammation and wall irritation in the pathogenesis of carcinoma. In elderly people, the danger increases 10% if chronic inflammation and irritation are present. There is a significant cancer effect due to anerobic bacteria and chemical substances [1, 5-7].

In 70% of the cases it is well-defined differentiated adenocarcinoma. In 15% of the cases it is a papillary vegetative carcinoma with protuberances into the gall bladder lumen, and in 65% of the cases infiltrative carcinoma. In 25% of the cases calcifications are present in the wall of the gall bladder. The most common localization is in the fundus or neck of the gall bladder. In more than two-thirds of the cases there is also liver tissue infiltration. Gall bladder carcinoma most frequently spreads into the liver and regional lymph glands, and less frequently into the stomach, duodenum, hepatic flexure of the colon and abdominal wall. At the time of the surgery, in more than one-third of the patients regional and distant metastases are found, spreading lymphatically, perineally and *per continuitatem* into the liver and bile ducts, usually leading to a lethal outcome [2-4].

The patients usually have no symptoms at all or non-specific symptoms are present. In some cases the symptoms of gall bladder inflammation do not appear until the progressive stage of gall bladder carcinoma. Sometimes, biliary colic is present. Obstructive type hepatitis appears after the obstruction of larger bile ducts. Rarely, do ascites and ileus appear.

Unfortunately, besides all modern diagnostic procedures, the diagnosis of the disease is established very late by ultrasonography and computed tomography scans. The gall bladder wall is often thick and uneven, sometimes with calcifications, and in continuity with the wall massive solitary infiltration of the surrounding liver tissue is often observed, while sometimes secondary deposits in the liver appear. In establishing the diagnosis, ascites aspiration or a laparoscopic diagnostic biopsy can be helpful.

The therapy for gall bladder carcinoma is complete removal. Unfortunately, in 80% of the cases the survival period is less than one year. Better results can be obtained only if the change is macroscopically invisible and established by histopathological analysis. In such conditions there is always a possibility to put the pregnancy on a sound basis if gestation is not more than 24 weeks [5].

Case report

During delivery planning an older primipara at 40 years of age and in the 38th week of gestation presented with severe pain in the region of the arch of the right ribs. There were no signs of pathological disturbances of the liver enzymes in laboratory analyses, and electrolyte status was regular. The patient had regular bowel movements, adequate appetite, with no signs of nausea, except in conditions of severe pain which were not related to eating or during certain periods of the day. Colic was sporadic with greenish fluid secretion. The pain stabilized with intravenous fluid therapy, occasional administration of spasmolytics and antibiotic therapy given to the patient.

During preparation for delivery, because of suspicion of the gall bladder concretions, we performed an ultrasonography examination of the abdomen. Although difficult, because of the gravid uterus at term pregnancy, the examination confirmed the incidence of a thick and uneven gall bladder wall with scattered

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calcifications. Sedimentation was suspected and removed immediately after the surgery. The delivery ended successfully without complications to the embryo or genital tract. The gall bladder was removed intraoperatively and a sample of the fluid was taken from the abdomen (a small quantity of ascites).

Remarkable data, obtained by establishing a diagnosis of gall bladder adenocarcinoma, point to the already confirmed high percentage of malignancies. Even with all the therapeutic methods the outcome was poor and the patient did not live more than six months after surgery.

Discussion

Analyzing the possibility of an earlier surgery we found how helpless we are in relation to this disease. The initial stage of the disease is deceitful. Even if it is discovered earlier by coincidence, it has a very poor prognosis.

The therapy of gall bladder carcinoma is complete removal. Unfortunately, in 80% of the cases the survival period is less than one year. Better results can be obtained only if the change is macroscopically in visible and established by histopathological analysis. In our case, malignant cells were found in the ascites, but macroscopically there were no signs of liver infiltration. A very important fact, which helped us in the diagnosis, is that the internal wall of the removed gall bladder had bumps.

Keeping in mind the rare incidence of this disease, it is very important to observe such condition in the clinical picture. Although medical methods are limited, we enable each person's right to live within the limits of our possibilities.

Although ultrasound is not specific enough, together with the laboratory results and clinical picture it gives the totality of approach to the patient.

Sometimes surgery is the one and only diagnostic and therapeutic treatment, even though many specific diagnostic procedures are now available in medicine.

Conclusion

Each pregnant patient, regardless of her age and the incidence of the risk factors, should be subjected to a routine abdominal examination, not only to determine the general health condition but also to prevent possible undiscovered anomalies and conditions that may go unnoticed.

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