

## MIRIZZI SYNDROME IN ASSOCIATION WITH SERUM CA 19-9 GREATER THAN 20.000U/ML: IS IT POSSIBLE?

*Síndrome de Mirizzi em associação com níveis séricos de CA 19-9 superiores a 20.000u/ml: é possível?*

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## INTRODUCTION

The CA 19-9 is a carbohydrate antigen of cellular surface described initially as a monoclonal antibody against cells of carcinoma colorectal lineage<sup>2</sup>. As tumor marker it is measured in patients with malignant diseases of pancreas and biliary tree. The elevation of this glycoprotein, however, is not restricted to malignant diseases. Values higher than 1000 U / ml are an exception in benign diseases<sup>4</sup>.

The present case has the goal to analyze the diagnosis of neoplasia in an icteric patient with high levels of the marker.

## CASE REPORT

Woman of 83 years was assisted with history of progressive jaundice, dark urine, hypochromia, pruritus, pain in right hypochondrium and weight loss. On physical examination the patient was icteric with discrete pain to palpation of right hypochondrium without evidence of palpable masses.

The laboratory tests in admission were: total bilirubin = 26, direct bilirubin = 15.8, gamma-glutamyl transferase = 829, alkaline phosphatase = 518, glutamic oxaloacetic transaminase = 115, alanine aminotransferase transaminase = 92, hemoglobin = 12.7, prothrombin time = 89%, antigen carbohydrate CA19-9 = 24 480 U / mL.

Computed tomography showed important dilatation of intra and extrahepatic biliary tree (Figure 1). Was also observed apparent compression of common bile duct by gallbladder, moderately

dilated with thickened walls, and image of calculus in its infundibulum of 2.0 cm. The possibility of biliary neoplasia was not removed.



FIGURE 1 - CT with significant dilatation of biliary tree

The patient was submitted to exploratory laparotomy in which was evidenced intense inflammatory process on triangle of Calot, with presence of fistula between the gallbladder and the common bile duct. Started by opening of gallbladder was identified calculus of 2.3 cm on infundibulum, the only one found. Choledochostomy with Kehr drain and control cholangiography was done with passage of contrast to the duodenum and absence of injuries or residual calculations. The liver biopsy revealed standard biliary portal reaction and obstruction of large ducts. Other biopsies did not reveal malignancy, and were compatible with acute and chronic inflammation and edema, confirming the diagnosis of syndrome of Mirizzi.

The patient evolved well post-operatively. Cholangiography on 9th day was normal. There was normalization of markers of cholestasis and significant decrease of serum level of CA 19-9 to 355.9 U / ml. On follow-up of three years the patient was in good state general without evidence of malignant disease and with serum levels of CA 19-9 in normality.

## DISCUSSION

The syndrome of Mirizzi was described first in 1948. Was divided in four types depending of degree of compression of hepatic duct or presence of fistula. This

condition can be suggested image, but many patients gave the diagnosis only at the operation with higher risk of iatrogenic lesion.

The elevation of CA 19-9 in benign diseases is reported in literature, both in biliopancreatic diseases as in other sites of gastrointestinal system 2.4. Expressive levels, however, are uncommon. The syndrome of Mirizzi appears as one of these rarities. Till nowadays, only four cases are reported and presenting CA 19-9 > 20,000 U / ml<sup>1,3,4,5</sup>.

The hyperbilirubinemia secondary to obstruction is present in majority of benign cases with elevation of CA 19-9, and the values tend the decrease or normalize after the resolution of cholestasis 2.4. Such fact was verified here.

The CA 19-9 is produced by the biliary epithelium and secreted in bile. Therefore, in cases of obstruction decrease its excretion and increase the absorption. Therefore, after the relief of jaundice, the levels tend to normalize. Such fact is rare in malignant diseases due to the production of antigen by the neoplasia<sup>2</sup>.

High levels of CA19-9 do not indicate the presence of malignancy. The syndrome of Mirizzi appears in terms to be remembered on differential diagnosis. The diagnosis of malignancy should be the first one to be sought in cases of cholestatic syndrome and high CA 19-9.

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