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Management Approach of Cholangiocarcinoma of Middle Third Bile Duct

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Abstract

Background: Prognosis of middle third cholangiocarcinoma according of recent studies remains poor. However, identifying survival predictors, mentioned a few; stage and patients age, still should take place in clinical practices especially for minor medical facility centers.

Case presentation: A 75 years old lady, was assessed and diagnosed with middle third cholangiocarcinoma, patients underwent from laboratory workup; where SGOT, SGPT were almost threefold elevated, as well Total bilirubin, direct and indirect, were four to tenfold higher than normal levels. CRP as well was seen tenfold higher than normal levels. MRCP was seen dilated of biliary ducts, dilatation of common hepatic duct, narrowing of common hepatic and ductus choledochus that goes with cholangiocarcinoma aspect. Thickness of junction lumen with solid mass 7 mm, infiltrates totally the wall that created the blockage, with increased of contrast intake, no infiltration of pancreas head is seen. Closeness of mass with the vena porta

There were seen two lymph nodes less than 1 cm in gastro hepatic ligament. No infiltration of inferior vena cava, common pancreatic ductus normal. No infiltration of superior mesenteric vena.

After multidisciplinary consultation and patient's decision informed consent was completed, personalized patients' treatment was performed, surgical intervention, biopsy and then adjuvant chemotherapy was applied, with a 3-year survival and quality life was achieved.

Conclusions: even in advanced cases of highly malignant cases like cholangiocarcinoma, even most of authors and surgeons agree in low survival rate according to study data, we should create a personalized strategy treatment of each patient in order to increase survival and quality of life as well

Keywords: Cholangiocarcinoma, surgical, chemotherapy, personalized treatment

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Introduction

Cholangiocarcinoma - CCA or otherwise known as bile duct carcinoma is a malignancy that originates from the cholangiocytes lining the biliary tree. It is the second most common primary liver malignancy, following hepatocellular carcinoma, accounting for 10%–20% of all hepatic cancers.[1] Based on where the tumor arises in the biliary tree, CCA tumors are classified into intrahepatic (iCCA) or distal, while tumors developing in the bile duct bifurcation are classified as perihilar (pCCA; Figure 1). The majority of CCA tumors are in the perihilar and distal regions, and only 10% are intrahepatic.[2] The typical age at presentation is the seventh decade, with a slight male predominance.[3]

Cholangiocarcinomas originally were grouped according to the location from which they arise as intrahepatic - ascending from the bile ducts inside the liver, perihilar - ascending from the bile ducts where they exit the liver, or distal - ascending from the bile ducts outside the liver. A new way of grouping depends on genetic testing using next generation sequencing that offers several new applicable therapies.

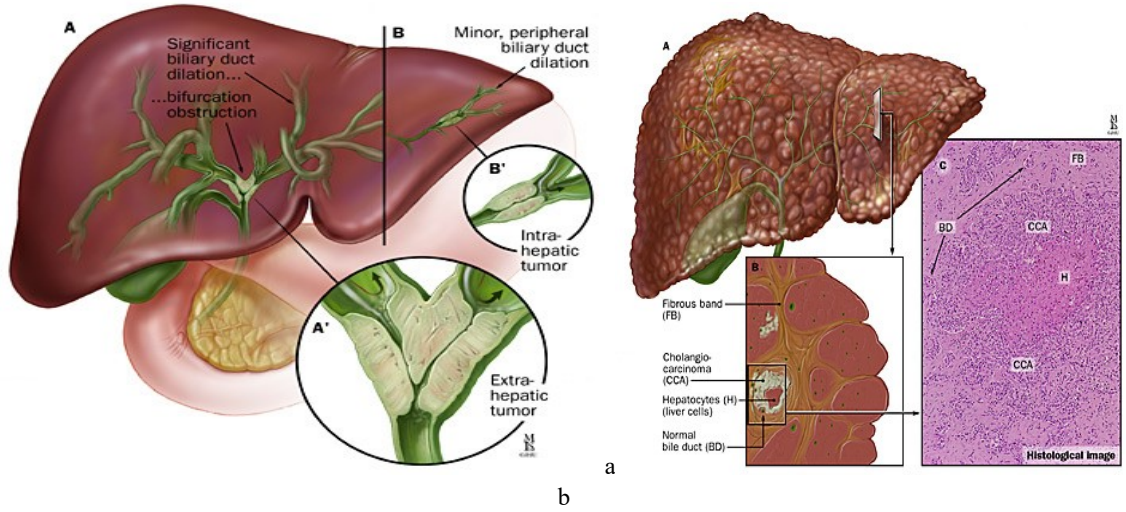

Figure 1 a and b. Illustration of bile duct tumor – credit John Hopkins Medicine

According to recent studies data, the five-year survival rate after resection of middle distal bile duct carcinoma remains low, despite resectability rates as high as 90 %. [4, 5]

Cholangiocarcinoma is uncommon in patients younger than 40 years old, with most tumors occurring in patients age between 50 – 70 years.

Clinical case presentation and discussion

A 75 years old lady, was assessed and diagnosed with middle third cholangiocarcinoma, patients underwent from laboratory workup; where SGOT, SGPT were almost threefold elevated, as well total bilirubin, direct and indirect, were four to tenfold higher than normal levels. CRP as well was seen tenfold higher than normal levels. MRCP was seen dilated of biliary ducts, dilatation of common hepatic duct, narrowing of common hepatic and ductus choledochus that goes with cholangiocarcinoma aspect. Thickness of junction lumen with solid mass 7 mm, infiltrates totally the wall that created the blockage, with increased of contrast intake, no infiltration of pancreas head is seen. Closeness of mass with the vena porta

There were seen two lymph nodes less than 1 cm in gastro hepatic ligament. No infiltration of inferior vena cava, common pancreatic ductus normal. No infiltration of superior mesenteric vena.

Intervention: the excision of choledochus up to hilar – bifurcation, together with gallbladder, including lymph nodes dissection of hepatic duodenal ligament, hepatic hilus and retro pancreatic as well was performed. Roux-en Y anastomosis of biliary routes with intestine was realized.

Biopsy material sample showed the results as well differentiated cholangiocarcinoma G1 – pT2bN0Mx.

Adjuvant chemotherapy was applied after multi-disciplinary consultation.

Follow up of up to 18 months no local recidivism was noticed and no increase of tumoral marks of 19.9.

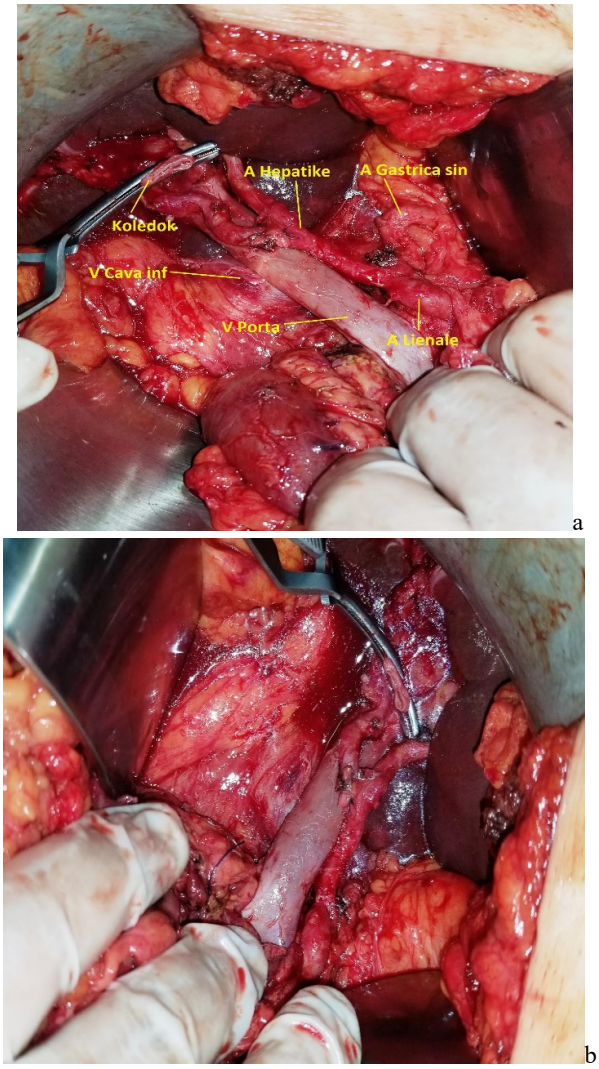

Figure 2 a and b. Surgical illustration of middle third bile duct carcinoma surgical intervention

The majority of patients with bile duct cancers are diagnosed when the cancer is far too advanced to be removed by surgery. In some patients, even if the cancer cannot be removed by surgery, an operation may be needed to relieve jaundice or blockage of the stomach outlet.[6] In patients in whom the cancer is diagnosed at an early stage where surgery is possible, complex operating techniques are often required and surgery should be performed by a specialist surgeon with expertise and experience in dealing with patients with bile duct cancers.[7, 8]

According to data, patient did have a 3-year survival life, overall, she did have an increased life quality during these years as well.

Conclusion:

Even in rare, advanced cases of highly malignant cases like cholangiocarcinoma, even most of authors and surgeons agree in low survival rate according to study data, we should create a personalized strategy treatment of each patient in order to increase survival and quality of life as well.

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