Von Meyenburg Complex in a Bariatric Patient

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An obese 54 year old female patient with a BMI of 43kg/m² was scheduled to undergo diagnostic laparoscopy and laparoscopic gastric bypass operation. At laparoscopy both liver lobes showed widespread small lesions involving all surface of liver, suggestive of metastatic malignant disease.

Liver was normal in shape with multiple intricate white to pale yellow nodular spots of average diameter 0.3 cm (Fig.1). Macroscopically the liver surface seemed smooth. Small wedge biopsy of liver was performed. The remainder of the operation was abandoned. Frozen section and histology revealed liver parenchyma containing numerous portal tracts. Within and at the edge of the portal tracts were proliferations of small to medium sized irregular ductuli lined by benign flattened biliary epithelium, embedded within fibrous stroma, representing multiple Von Meyenburg complexes, possibly and frequently considered part of hepatic fibropolycystic disease. Some of the portal tracts showed mild chronic inflammation. There was no dysplasia or malignancy.

The ductal plate is a double-layered cylindrical bile duct structure, which is present in human fetal livers [1]. A persistent fetal ductal plate in a postnatal liver is called ductal plate malformation or hepatobiliary fibropolycystic disease, the commonest of which is Von Meyenburg complex. Von Meyenburg complexes are multiple bile duct hamartomas and represent small benign neoplasms of the liver, containing cystically dilated bile ducts embedded in a fibrous stroma [3].

Differential diagnosis includes multiple secondary liver metastases, primary tumor of the liver, infiltrative diseases, non alcoholic fatty liver, intrahepatic cholangiocarcinoma and metastatic adenocarcinoma. The clinical importance of bile duct hamartomas is its ability to mimic metastatic disease of the liver [2]. No association with obesity is so far mentioned in the literature.

References