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Pathology

Case Report

# Mucinous Cystadenoma of Gallbladder: A Rare Case Report

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#### Abstract

Mucinous cystic neoplasms of the gallbladder are very rare, benign, cystic neoplasms composed of cystic epithelial proliferation of cells containing intracytoplasmic mucin. These tumors occur in middle aged women. We report a case of 42yrs old woman who presented with epigastric pain. The histopathological examination of resected gallbladder specimen showed a benign, multiloculated, mucinouscystadenoma.

Keywords: MCNs - mucinous cystic neoplasms.

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### **INTRODUCTION**

Mucinous cystic neoplasms of the gallbladder are extremely rare, benign, unilocular or multilocular cystic tumors that may contain septations. Traditionally known as mucinous cystadenoma is a subtype of mucinocystic neoplasm which according to WHO classification has been defined as epithelial cystic proliferation composed of cells that contain intracytoplasmic mucin [1]. In hepatobiliary system MCNs most frequently originate in liver followed by extra hepatic biliary system. MCNs originating from gallbladder account for 0.2% of the hepato biliary cases [2].

### **CASE REPORT**

A 42yrs old woman on treatment for hypertension and hypothyroidism presented with intermittent epigastric discomfort and pain for three months. Ultrasonography of abdomen showed contracted gallbladder with few echogenic foci? Sludge with chronic cholecystitis. Liver showed diffuse increase in echogenicity suggestive of fatty liver. Laproscopic cholecystectomy was done. In pathology lab an already cut open gallbladder specimen measuring 5cms was received. Lumen was filled with thick mucoid material. Microscopic examination showed columnar mucosal lining epithelium wilh focal epithelial hyperplasia. The wall showed multiple cystic spaces filled with mucin and lined by tall columnar mucin secreting epithelium with basal nuclei and no atypia - a diagnosis of mucinous cystadenoma, gallbladder was given (Fig 1).



Fig-1: Cystic spaces filled with mucin and lined by mucin secreting tall columnar epithelium

### DISCUSSION

MCNs are benign cystic proliferations of hepatobiliary system. Liver being most common site accounts for 85% of cases[3]. MCNs originating in gallbladder are extremely rare. MCNs affect women more frequently, with a mean age at presentation of 45yrs. The clinical presentation may be intermittent abdominal pain, epigastric discomfort and very rarely jaundice when bile duct obstruction is there[4]. Sometimes these lesions are detected incidently in asymptomatic cases on abdominal ultrasonography.

Ultrasonography is a sensitive investigation for diagnosis. The typical findings include anechoic cystic lesions with thickened irregular walls and internal septations[5]. Multilocular MCNs are more common

than unilocular<sup>6</sup>. The lesions may be filled with serous, mucinous, hemorrhagic or mixed fluids. A primary hydatid cyst, lymphangioma, an epithelial cyst associated with adenocarcinoma of gall bladder are some of other cystic lesions of gallbladder reported in literature [7].

Histologically three main subtypes of MCNs are described: pyloric gland, intestinal and biliary. The pyloric gland type is most common in gallbladder<sup>8</sup>. Some types of MCNs have ovarian like stroma that contain estrogen and progesterone receptors and affect women more often [9]. Malignant potential of mucinous cystadenomas is not certain as there are discrepancies across the literature. Surgical removal of gallbladder is the main modality of treatment [4].

#### CONCLUSION

Mucinous cystadenomas of gallbladder are extremely rare. For appropriate management of these tumors established guidelines have not been developed. There is lack of consistent evidence regarding malignant potential of gall bladder mucinous cystadenomas making this entity a diagnostic and therapeutic dilemma. So all the MCNs originating in gall bladder should be imaged, surgically removed and evaluated histopathologically to establish the nature of disease.

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