



RIEDEL'S LOBE; A CLINICAL DIAGNOSTIC DILEMMA: RARE CASE REPORT

Dr Doddy Ishanshu Mishra

Junior Resident Department of General Surgery, RIMS Ranchi

Dr Mrityunjay Sarawgi*

Professor Department of General Surgery, RIMS Ranchi*Corresponding Author

ABSTRACT

INTRODUCTION: Riedel's lobe is a tongue like downward projection from right lobe of liver found in 3-30% of general population, mostly females.

CASE PRESENTATION: A 44 yr old female presented with pain abdomen and bloating after heavy meals. On examination a globular lump at right hypochondrium was palpable. USG whole abdomen was normal. CECT Whole abdomen suggested hepatomegaly with Riedel's lobe.

DISCUSSION: Riedel's lobe is a rare anatomical variant of liver as a tongue like projection. Mostly found as an incidental finding in a middle aged female. When symptomatic, it is due to stretching of Glisson's capsule or due to torsion.

CONCLUSION: Riedel's lobe is mostly asymptomatic but complications like torsion and metastasis in Riedel lobe is commonly seen, and thus the knowledge of anatomy of this lobe is important.

KEYWORDS : Riedel's lobe, Palpable lump, CECT

INTRODUCTION:

Riedel's lobe is a rare anatomical variant seen as a tongue like downward projection on the anterior aspect from the right lobe of the liver on right side of Gall bladder[1]. It was at first observed by Riedel in 1888 in 7 female patients that was confirmed as an extension from the right lobe of liver during surgery[2]. It is found in about 3-30% of the general population globally[3]. It is commonly found in female patients and usually found as an incidental finding. Its clinical importance lies as a differential diagnosis in Right hypochondrial lump, commonly as a differential diagnosis in case of a palpable Gall bladder lump.

CASE PRESENTATION:

A 44 yr old female patient presented in Surgery OPD at RIMS Ranchi with 4 month old history of pain abdomen predominantly at right upper quadrant associated with bloating sensation after heavy meals. On general examination, there was no pallor or icterus, vitals were stable; On per abdominal examination, Abdomen was soft otherwise and non tender. A lump of about size 6x6 cm, globular in shape, moving well with respiration was found at right hypochondrium. Liver was as such not enlarged on palpation. Bowel sound was normal. Provisional diagnosis made was a palpable GB mass. Her routine investigation of blood including LFT was normal. Lipid profile was also within the normal limit. Tumor markers like CEA and CA 19-9 was within normal range. USG of whole abdomen was normal. CECT Scan of whole abdomen showed hepatomegaly (18 cm) and presence of a homogenous extension in caudal direction from right lobe of liver, features suggestive of Riedel lobe.

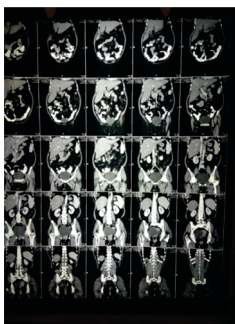


Figure 1. Showing coronal plane slice in CECT whole abdomen with an extension from right lobe of liver.

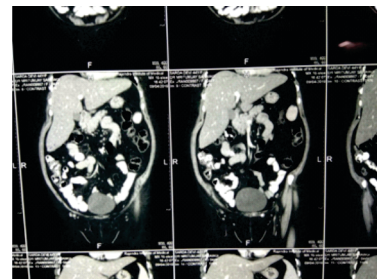


Figure 2. Showing extension from the right lobe of liver on right side of Gall bladder with fatty changes in the liver parenchyma.

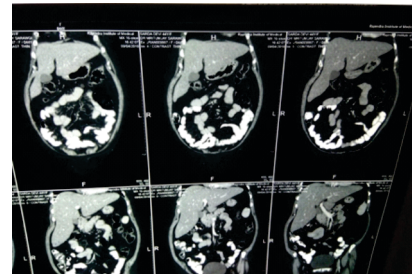


Figure 3. Showing clearly presence of the Riedel's lobe as a tongue shaped downward extension from the right lobe of liver.

DISCUSSION:

Riedel's lobe is a rare anatomical variant in liver found as a tongue like downward extension from the right lobe of liver on the right side of Gall bladder. Riedel described this lobe in 1888 as a round tumor on the anterior side of liver from the right lobe[1] in 7 female patients that was confirmed during surgery. It is sometimes also referred as a "floating lobe". It is found usually in the females and is found in about 3-30% of the global population[3]. Although it is a congenital anomaly due to formation of an accessory hepatic bud[4]. But can also be formed in later life due to traction seen as a part of adhesional syndrome in lithiasic cholecystitis[2]. Also can be formed as a developmental anomaly of thorax[5]. Some cases of "Riedel lobe like" appearance of liver are also seen after some sort of surgical interventions[6]. Generally Riedel lobe are found incidentally but may get complicated due to torsion or excessive stretching of the Glisson's capsule. Also some have

reported that metastasis can occur solely in the lower part of the Riedel's lobe without involvement of any other area of liver[7,8]. Its differential diagnosis includes palpable GB lump, hepatic metastasis, hydatid cyst of liver and other causes of hepatomegaly. Diagnosis is usually by CT Scan of whole abdomen revealing a tongue like projection that is homogenous to the liver parenchyma and projects from right lobe of liver, right to the gall bladder. On performing colour doppler USG or CT Angiography its blood supply can be clearly seen arising from the hepatic artery[9]. Most of the time, it remains asymptomatic and is found incidentally when the patient is getting investigated for some other symptoms. When symptomatic, it may produce a vague abdominal discomfort due to stretching of Glisson's capsule or torsion of the lobe itself specially when it is pedunculated; and when complications are recognised it should be managed as early as possible. Riedel's lobe can also be therapeutically used as the donor in hepatic transplant and studies are being carried on this. It does not need any intervention and only reassurance is being done.

CONCLUSION:

Riedel's lobe can be misdiagnosed as a palpable GB lump or hepatic metastasis or any other right hypochondrial lump. Thus the knowledge of anatomy of Riedel's lobe is very important for a clinician. Although Riedel's lobe is a very rare anatomical variation, it can always be in mind of the clinician as a differential diagnosis in case of any right hypochondrial lump. Various studies to use this lobe as a donor for hepatic transplant is being carried on. The only issue in case of presence of Riedel's lobe is early diagnosis of any complication, otherwise it does not need any intervention, and only reassurance is of utmost importance in this case.

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