



Segmental Hepatic Atrophy: A Case Report of Incidental Pseudotumor of the Liver

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Introduction

We present the case of an incidentally identified hepatic pseudotumor, a rare lesion which can be confused for malignancy or concerning benign pathology. Incidental intraoperative findings are common in laparoscopic surgery, and we present here a rare process which is not frequently reported in the literature.

Case

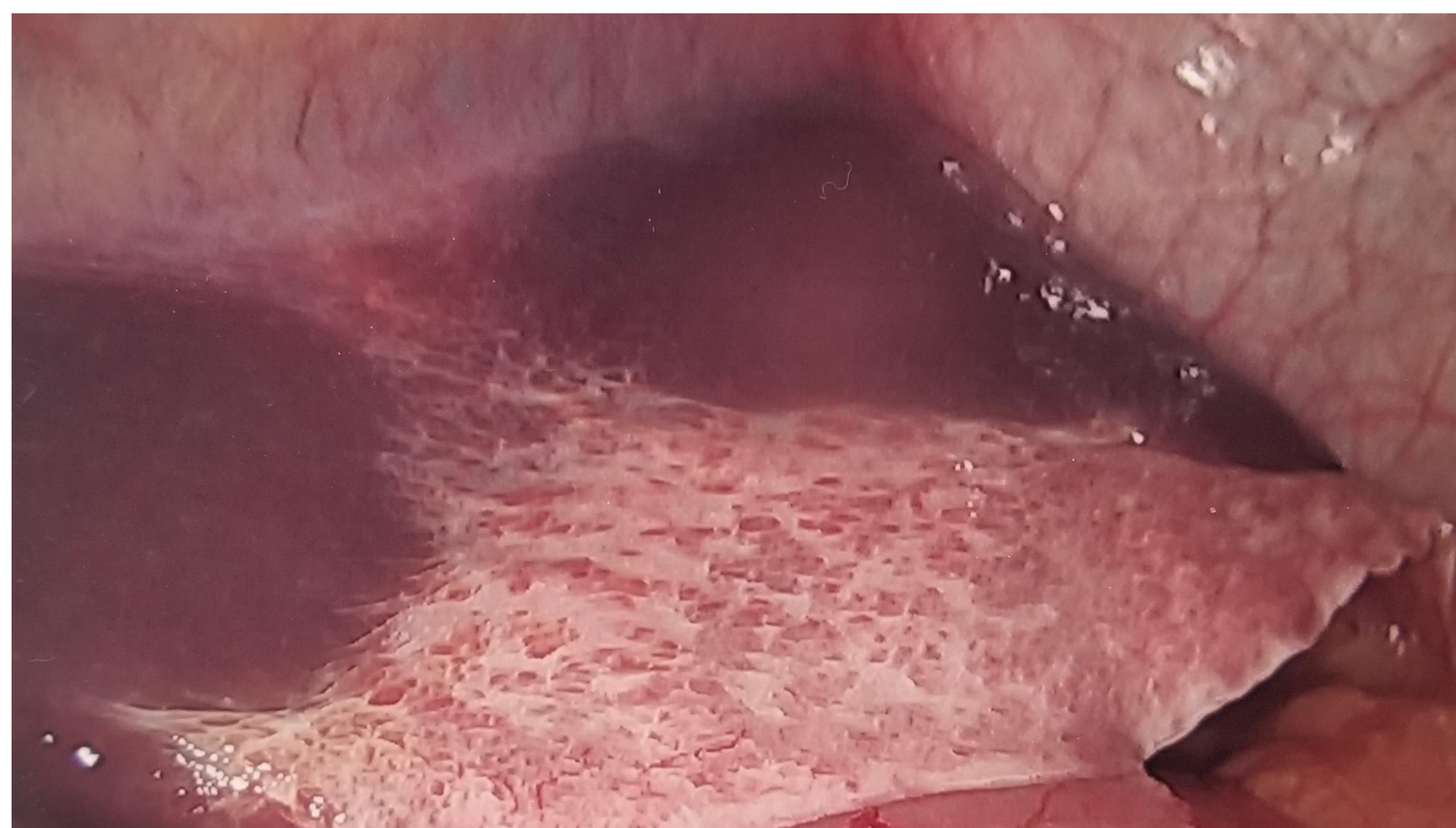
51 year old female nurse was referred to General Surgery clinic with complaint of recurrent and persistent gastroesophageal reflux. Symptoms were predominantly postprandial, and she denies dysphagia or odynophagia. She had trialed H2 receptor antagonist over the counter as well as proton pump inhibitors, which both failed to alleviate her symptoms. Comorbidities including hypertension, obstructive sleep apnea, and obesity with a BMI of 29. Her postprandial reflux symptoms failed to improve with weight loss and behavior modification.

Prior to surgical referral her evaluation included evaluation with EGD with mild patchy gastropathy, with biopsies showing no *Helicobacter Pylori* infection.

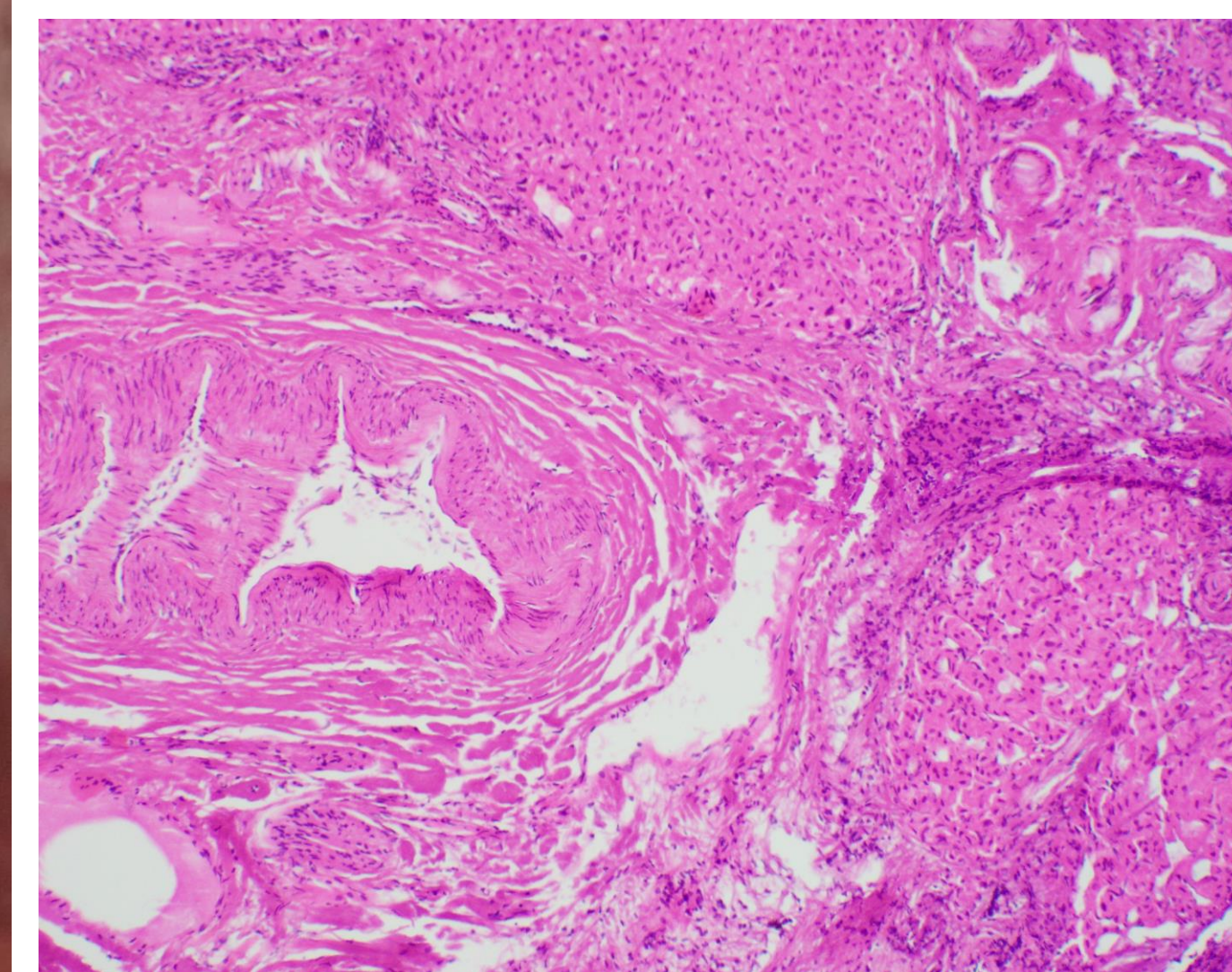
High resolution manometry and pH probe with Demeester score of 18.7(normal <14.72), with moderate symptom correlation and frequent (36%) failed peristalsis (normal<30%). She underwent gastric emptying study which was normal and upper GI series which confirmed a hiatal hernia and mild reflux. She elected to undergo hernia repair and fundoplication for symptom relief.

Case continued

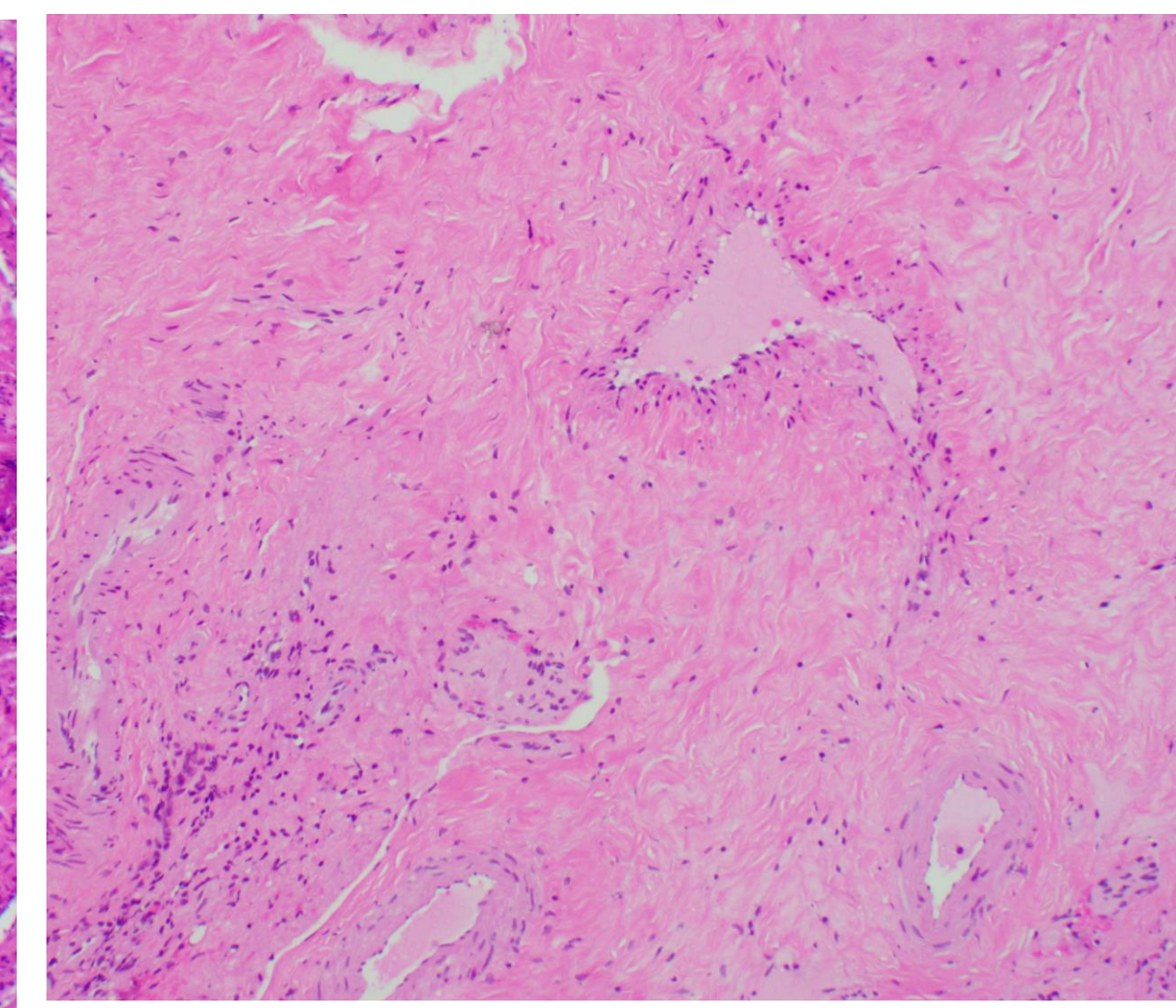
During the course of Laparoscopic Toupet Fundoplication segmental hepatic atrophy was identified in segments III, IVb, V. Stapled wedge biopsies revealed thickened blood vessels, portal and periportal fibrosis on masons trichrome, and elastosis on elastin stain; all histologic findings suggestive of atrophy, as well as presence of Von Meyenburg Complexes. Postoperatively liver function testing was normal, and hepatitis serologies were notable only for previous Hep B immunization (HbSAb detectable).



Laparoscopic finding of wedge shaped nodularity with apparent atrophy



Left: Von Meyenburg Complex Lower right corner



Notable acellularity, atrophy

Discussion

Segmental hepatic atrophy secondary to Von Meyenburg Complexes (VMC) is a rare process which is diagnosed histologically. VMCs are congenital biliary hamartomas, and generally a benign process, identified on MR imaging or at autopsy. There are case reports of VMCs associated with severe portal hypertension³, cirrhosis, and neoplastic transformation . This process leads to the formation of pseudotumors in the liver, tending to be subcapsular, and associated with mass lesions¹. Symptomatic cases of hepatic pseudotumor tend to be associated with hepatic dysfunction, particularly with cirrhosis. Von Meyenburg complexes are associated with renal and hepatic cysts on autopsy studies, and have been misdiagnosed as cystadenocarcinoma of the biliary tree.

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Discussion cont.

There is growing evidence that these congenital hamartomas have an association with malignant transformation⁵. Incidental findings during laparoscopic surgery are common, with hepatic findings as frequently as 5% in one study of gynecologic cases. Familiarity with potential incidental findings is necessary for sound intraoperative decision making. This case serves as a reminder of the need to obtain tissue diagnosis for potentially malignant disease, even when operating for otherwise benign pathology⁶.

References

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