



Rapid Rupture of Liver Lesions: Slowing Down to Recognize Hepatic Adenomatosis



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LEARNING OBJECTIVES

1. Learn how characteristics of liver lesions can help weigh your differentials
2. Describe risk factors for hepatic adenomatosis
3. Understand the double-edged sword of cancer as a differential diagnosis

CASE DESCRIPTION

HISTORY

A 31-year-old woman with a history of portal vein thrombosis at age 8 with cavernous transformation resulting in non-cirrhotic portal hypertension presented with acute onset of upper abdominal pain.

EXAM

Pale, tachycardic, diffuse abdominal distention and tenderness

LABS/IMAGING

Hgb drop 14 → 7.4 g/dL
AFP, beta-HCG, CA 19-9, CEA normal

CT A/P scan revealed multiple low attenuating lesions in the liver concerning for liver metastatic disease and heterogenous appearance of ascites. Mixed attenuation though no layering seen with hemorrhage. Most concerning for omental thickening or peritoneal carcinomatosis.



HOSPITAL COURSE

DIAGNOSTIC PARACENTESIS:
Frank blood, 2.9 million RBCs/L

CT ANGIOGRAM:
No active bleeding but concerning for rapidly growing lesion that ruptured

IR EMBOLIZATION:
Left hepatic liver lesion

LIVER BIOPSY:
Multifocal hepatic adenomas, also called hepatic adenomatosis

LIVER LESION RISK OF RUPTURE

LIVER LESION	RISK OF RUPTURE
Hemangioma	Extremely rare
Focal nodular hyperplasia	Extremely rare
Hepatocellular carcinoma	3 – 15 % risk of rupture
Hepatic adenoma	25 – 64% risk of rupture
Hepatic adenomatosis	Up to 62%

RISK FACTORS

HEPATIC ADENOMATOSIS:

- Obesity
- Hepatic steatosis
- Metabolic syndrome

HEPATIC ADENOMAS

- Use of estrogen
- Anabolic androgens
- Genetic syndromes
- Glycogen storage disease
- Familial adenomatous polyposis

DISCUSSION

1. Utilize the lesions characteristics
 - The rupture of a liver lesion is very informative
 - Not many liver lesions will lead to a hemoperitoneum
 - Hepatocellular carcinoma may rupture however it typically takes a month to double in size
2. Don't rely on risk factors
 - Our patient has a hormonal IUD
 - That is not a clear risk factor for hepatic adenomatosis
 - She had portal hypertension but no diagnosis of cirrhosis concerning for HCC
3. Cancer is a difficult differential
 - Concern for hepatocellular carcinoma with peritoneal carcinomatosis
 - Concern for unknown primary cancer with metastatic disease to liver
 - Extensive evaluation:
 - CT chest
 - Pelvic US
 - Tumor markers
 - Oncology consult
 - Lesson
 - Obtain tissue as quickly as possible!

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