

Secondary Metastasis In A Cirrhotic Liver. A Rare Case Report

Nikhil Rathi ¹, Sourya Acharya ², Samarth Shukla ³, Shivali Kashikar ⁴,
Kriti Gupta ⁴

Resident, Department of Medicine¹, Professor, Department of Medicine
Professor², Department of Pathology³, Professor, Department of Radiodiagnosis⁴,
Intern, Department of Medicine
JNMC, DMIMS Univ. Sawangi (M), Wardha; 442004 Maharashtra

Abstract: It has been said that cirrhotic liver is an infertile soil for the development of secondaries from extrahepatic malignancies. We present case of cirrhosis of liver with secondaries from a duodenal malignancy.
Key words: cirrhosis, extrahepatic malignancy, duodenal malignancy.

I. Introduction

Studies in the past has suggested that it is a rare occurrence to find secondaries from extrahepatic malignancies to spread to the cirrhotic liver. Various explanations has been given for that, such as cirrhotic liver being an infertile soil is not conducive for the spread of the tumour or that the patients with cirrhosis of liver don't live long enough so that the metastasis from the extra hepatic sites spread to the liver. But there has been isolated reports of metastasis to the cirrhotic liver. Studies also demonstrate that even the type of extra hepatic malignancy has effect on the part involved by the secondaries from that tumor.

II. Case Report

A 45 year old chronic alcoholic presented to us with 3 episodes of haematemesis within 7 days period. There was no history of abdominal distension, jaundice, abdominal pain, maleana and haematochezia. Past history was insignificant. He was a chronic alcoholic consuming around 120ml to 140ml of country liquor daily for around 5 to 6 years. General physical examination revealed, pulse-100/min, regular. BP-104/70mmHg, Pallor was present, bilateral pitting edema feet. There was no icterus, lymphadenopathy. JVP was normal. Signs of hepatocellular failure were absent except mild bilateral parotid enlargement. Per-abdomen examination revealed free fluid and grade 2 splenomegaly. Cardiovascular, respiratory & neurological examination was normal.

On investigations, Hb—8.2gm%, Microcytic Hypochromic type. TLC – normal, Serum bilirubin, AST, ALT, Alkaline phosphatase were within normal limits. PT/INR was normal. HBsAg, HCV & HIV were negative. USG abdomen revealed features suggestive of cirrhosis of liver with portal hypertension. Along with multiple hypoechoic lesions diffusely scattered in the liver. Suggestive of secondaries. There was another hyperechoic lesion in relation to 2nd part of duodenum. CECT scan of the abdomen was done which revealed multiple gastrointestinal polyps largest one in second part of duodenum with malignant transformation in it with infiltrative liver metastasis along with portal hypertension. (Figure 1,2,3) Upper GI endoscopy revealed grade III oesophageal varices. Patient was treated with endoscopic variceal ligation. Prophylactic beta-blocker was started. Patient was not ready for further management & took discharge on request.

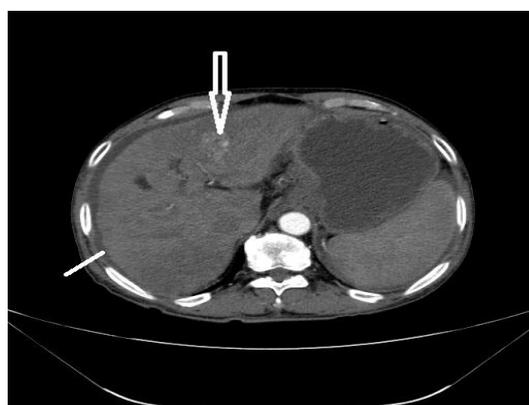


Fig 1 : Axial contrast enhanced arterial phase computed tomography showing irregular liver margins (arrow) & an illdefined hyperenhancing lesion in the left lobe of liver (arrowhead)

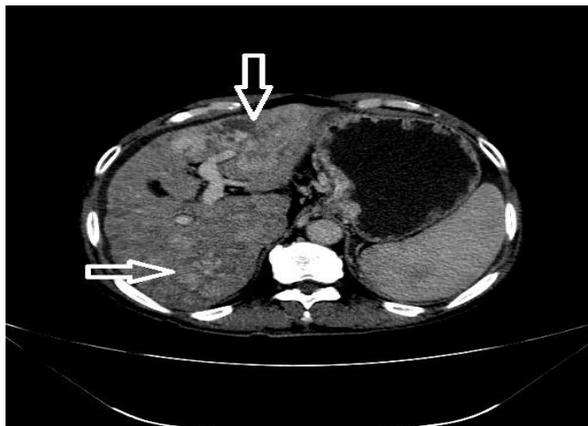


Fig 2: Venous Phase axial contrast enhanced computed tomography showing hyper enhancing ill-defined lesion (arrowhead) with ill-defined lesion in the right lobe (arrowhead)



Fig 3 Axial arterial phase contrast enhanced CT image showing Large heterogeneously enhancing lesion in 2nd part of duodenum suggesting malignant transformation of a polyp.

III. Discussion

Metastatic carcinoma is rarely seen in cirrhotic liver. Various explanations for the rarity of this coincidence have been put forward, but, so far, none have been generally accepted. Studies¹ suggested that the cirrhotic liver may represent an unsuitable "soil" for metastatic cancer. One hypothesis suggests altered vasculature of the cirrhotic liver may be the factor for the same. Another theory explains that portal cirrhosis may be fatal before patients have a chance to develop cancer, or, should cancer supervene, patients with cirrhosis may not live long enough to develop metastasis.^[2]

The possible explanations which contradicts the original hypothesis might be, the aggressiveness of the tumour. It has been postulated that the tumour once spread beyond the regional lymph nodes it involves the cirrhotic liver with equal frequency than the non cirrhotic liver.^[2]

Another study^[3] showed that in cirrhotic livers, metastases from neuroendocrine tumors were predominantly localized within the parenchymal nodules, while nonendocrine carcinomas metastasized to the fibrotic septa. The study also suggested that, patients with cirrhosis develop less frequently extrahepatic malignancies and hepatic metastasis than patients without cirrhosis, probably because of a shorter life expectancy due to the complications of liver cirrhosis. According to study^[2] high mortality of cirrhosis is probably responsible for the diminished tendency of malignant tumors to metastasize as well as for the infrequency of cancer in this group. Finally the study concluded that secondary metastasis may not be a rarity in cirrhotic liver. Coexistence of both the conditions will be dictated by, stage of cirrhosis & its complications, nature of the tumour, aggressiveness of the primary tumour & other associated co-morbidities.

References

- [1]. Lisa, J. R., Solomon C., and Gordon, E. J. Secondary carcinoma in cirrhosis of the liver. *Am. J. Path.*, 1942, i8, 137-140.
- [2]. Ruebner Bh, Green R, Miyai K, Caranasos G, Abbey H. The rarity of intrahepatic metastasis in cirrhosis of the liver. A statistical explanation with some comments on the interpretation of necropsy data. *Am J Pathol.* 1961 Dec;39:739-46.
- [3]. Vanbockrijck M, Klöppel G. Incidence and morphology of liver metastasis from extrahepatic malignancies to cirrhotic livers. *Zentralbl Pathol* 1992 Apr; 138(2):91-6.