Global Scientific JOURNALS

GSJ: Volume 10, Issue 3, March 2022, Online: ISSN 2320-9186

www.globalscientificjournal.com

**Liver metastasis presenting as Liver abscesses**

ABSTRACT

Liver metastasis can present on imaging as well as clinically sometimes as liver abscesses. We report a case of 81 year old male patient presenting with right upper quadrant pain, fever and malaise. Ultrasonography and contrast enhanced CT scan abdomen showed hypodense areas in liver suggestive of liver abscess. However, find needle aspiration cytology later revealed it to be metastatic deposits.

Introduction:

Liver metastasis and liver abscess may mimic each other clinically as well as on imaging .

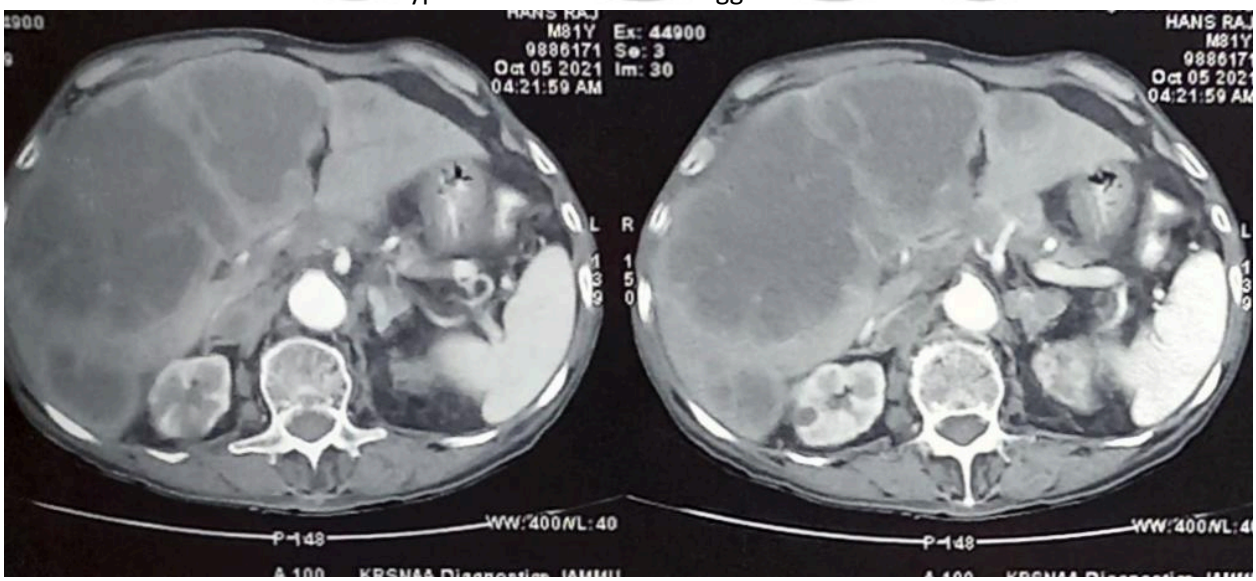
Case presentation –

An 81 year old male patient with no medical history presented with right upper abdominal pain associated with fever for the past 10 days.

Patient also complained of breathlessness and malaise.

On physical examination, patient had lump extending from right hypochondrium to epigastrium. Liver was not separately palpable. Blood tests showed leucocytosis and raised ESR.

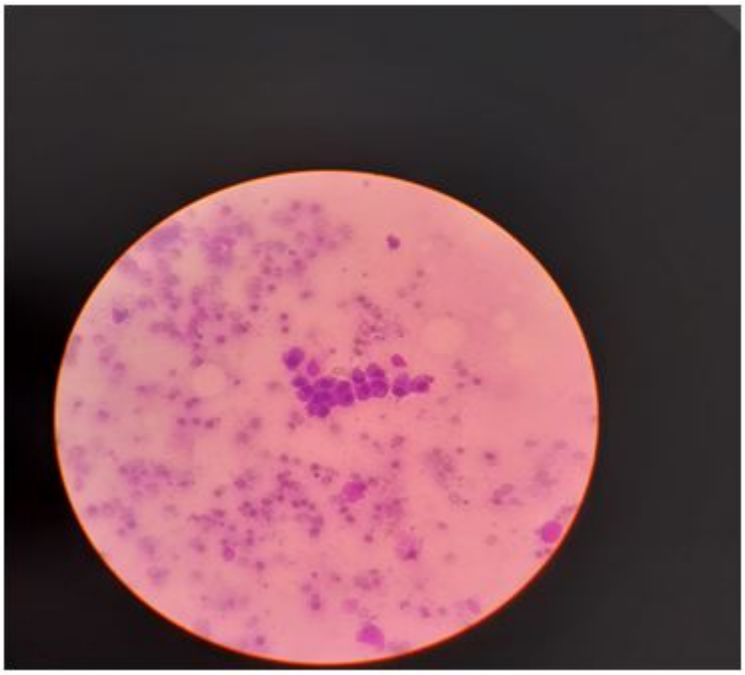
Abdominal ultrasound showed hypodense areas in liver suggestive of abscess.



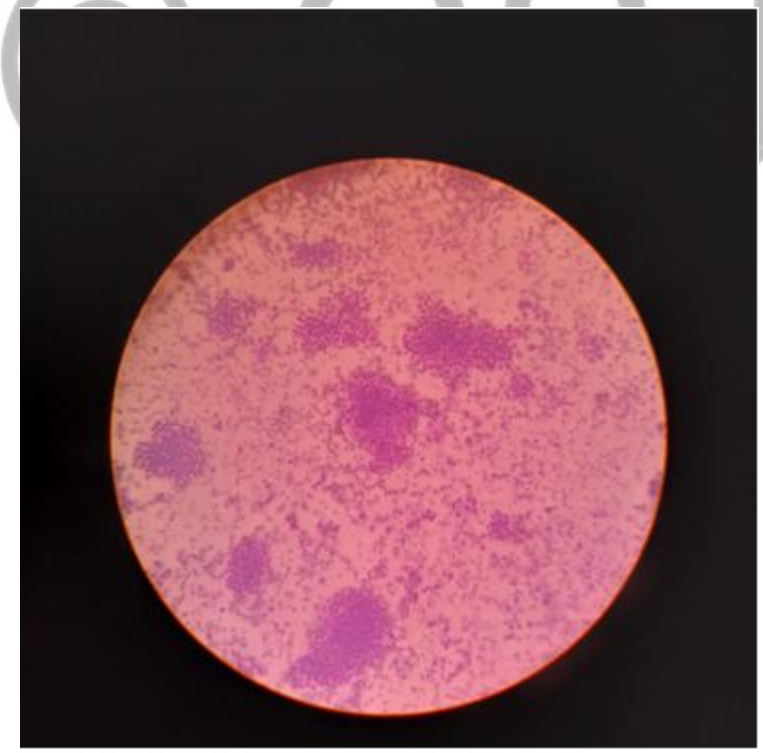

CECT abdomen showed hypodense areas in liver with thick enhancing walls suggestive of liver abscesses.

Patient was started on antibiotics but on failing to respond, FNAC was planned.

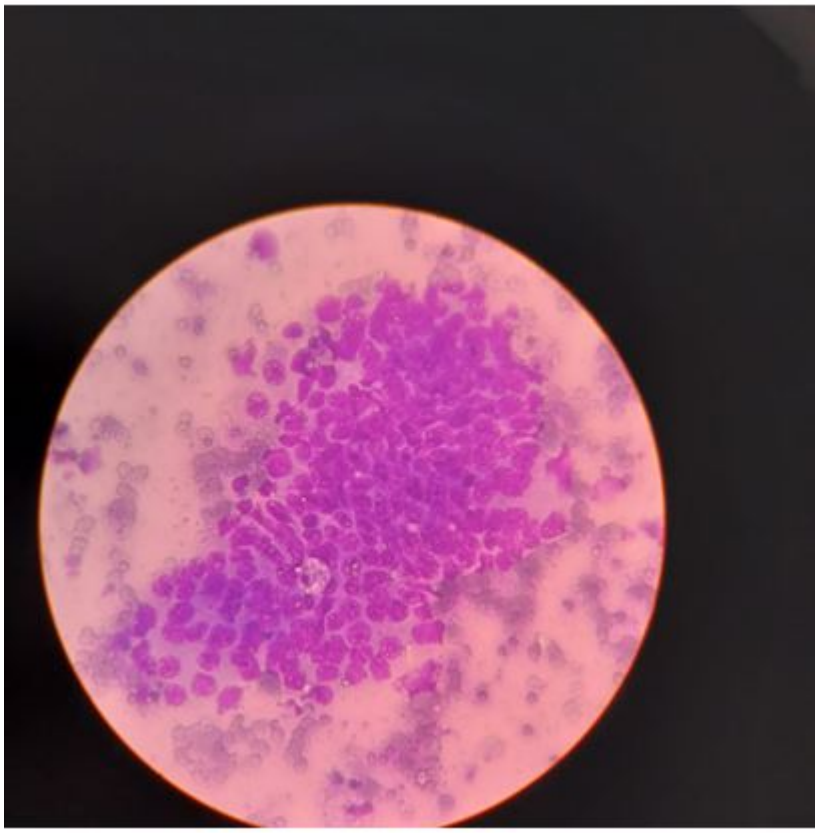
FNAC revealed metastatic deposits.



MICROSCOPY FINDINGS: Normal hepatocytes.



Low power: Cluster of malignant cells.



High power microscopy:Round to oval cells with coarse chromatic,high N:C ratio,prominent nucleoli and moderate amount of vacuolated cytoplasm.

Patient was started palliative care but was lost to follow up.

**Discussion:**

Liver metastasis may present as hepatic abscess due to non specific and complex symptoms. Level metastasis are silent while liver abscess presents with fever, chills and right upper quadrant pain.

Similar complaints may be present in liver metastasis, because of secondary infection or super infection of spontaneous necrosis.

Few similar cases of hepatocellular carcinoma mimicking liver abscess was reported by Yeom et al and hayashi et al.[1],[2].

Metastasis are most common malignant liver lesions and are about 18 to 40 times more common than primary liver tumours [3].

Liver metastasis are commonly detected in a range of malignancies including colorectal carcinoma, pancreatic cancer, melanoma, lung carcinoma and breast carcinoma,although colorectal carcinoma is the most common primary carcinoma that metastasises to liver [4].

Accurate detection of metastatic disease at time of diagnosis or during course of treatment remains crucial to patient management [5].

One of the main difficulties in liver imaging for metastatic disease is the high prevalence of benign liver lesions that can be misinterpreted as evidence of metastatic disease .

In general, the imaging appearances of liver metastasis are non specific and biopsy specimen are required for histological diagnosis.

Because of non specific radiological features, percutaneous biopsy with histopathology studies may be required for word definitive diagnosis. [7].

FNA is considered gold standard with a yield that is highly sensitive [8].

CT findings of findings neoplasm may appear similar to liver abscesses because some neoplasms may also present with tumor necrosis.

A non resolving liver abscess should be considered a neoplasm [9].

Abscesses and neoplasms can both show increased [18 F] fluoro deoxy glucose uptake on PET,making diagnosis difficult. It is not recommended to differentiate a liver abscess from malignancy by PET alone [10,11 ].

A diagnostic tumour aspiration may be necessary to differentiate an Abscess from malignancy.

Some patients may refuse liver aspiration because it is invasive and has risks such as bleeding, tumour seeding or infection [12].

However, the timely diagnosis of liver tumours is essential to improve survival [13].

Conclusion:

1. Liver abscesses and liver metastasis are often difficult to differentiate On account of complex symptomatology and similar features on imaging.
2. Patient with liver metastasis can present with fever, malaise, unexplained anemia and right upper quadrant pain as is seen in a patient of liver abscess.
3. CT and USG are the most common investigations that are used in such patients.
4. A diagnostic tumour aspiration may be necessary to differentiate an abscess from malignancy.
5. Timely and correct diagnosis is essential for further patient management.

References

1.Yeom Jo,,Yoon Sb,Kim JG,Oh JH et al.

A case of HCC combined with liver abscess.Korean J Gastroenterol 2009.Jun;53(6):378-382.

2.Hayashi T,Honda H,Kaneko K et al.

Hepatocellular carcinoma with pyrexia:report of a case .

Radiation.Med 1995.May-Jun;13(3):133-136.

3.Ward J.New MR techniques for the Detection of liver metastasis. cancer imaging 2006; 6: 33 – 42.

4. Diamantis I. Tsilimigras.

Nature reviews disease premieres 7, article number: 27 (2021).

5.Gregory T. Sica, Hoon Ji

CT and MR imaging of hepatic metastasis. American Journal of Roentgenology volume 174:, issue 3; Pages 691- 698.

6,7. Kaontar Imrani,Thawte Oubaddi et al. British institute of radiology, volume 7, number 4 – liver metastasis mimicking an abscess.

8.Shah V,Arora A,Tyapi P et al. Intra hepatic cholangiocarcinoma masquerading as liver abscess. J clin Exp Hepatol 2015; 5: 89- 92.

9.Tan GJ,Berlangieri Su et al.

FDG PET/CT in liver lesions mimicking malignancies . Abdom Imaging 2014; 39: 187- 195.

10.Lim D,Lee SY,Lim KH et al.

Hepatic adenoma mimicking a metastatic lesion on CT-PET scan.World J gastroenterol 2013; 19: 4432-4436.

11. Shyamalan K,Grisham HC,Murgod S.Risk of tumour cell ceiling through biopsy and aspiration cytology.

J Int Soc Prev Community Dent 2014;4: 5- 11.

12. Wang, chih Hsin MD;Sun et al.Tumour like liver abscess mimicking malignancy with lung metastasis in patients with acute renal failure.Medicine: March 2016- volume 95- issue 11

P- e3145.