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An uncommon complication of liver abscess

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ABSTRACT

Liver abscess secondary to E.histolytica and other infections is commonly encountered in developing countries and travellers to endemic regions. There have been several studies discussing the uncommon formation of inferior vena caval/hepatic vein thrombosis caused by the extension of liver abscess. This case study highlights the rare occurrence of deep vein thrombosis involving bilateral iliac, common femoral, superficial femoral, popliteal and great saphenous veins along with multiple liver abscess in the absence of risk factors for deep vein thrombosis.

Keywords: Liver abscess, DVT, Entamoeba histolytica

INTRODUCTION

Acute infections play a role in increasing the risk of arterial cardiovascular events, but it also acts as a precipitating factor for deep vein thrombosis. This has been brought to light by a few studies. [8, 9] The following case study provides more evidence by establishing the occurrence of deep vein thrombosis in a case of multiple liver

abscess- an acute infection in a patient with no other apparent risk factor for deep vein thrombosis.

CASE HISTORY

A 39 year old male patient presented with the complaints of bilateral leg swelling and abdominal pain. History of fever present. History of weight loss present. Patient was not a known case of

diabetes mellitus, systemic hypertension, bronchial asthma, tuberculosis or coronary artery disease. On admission patient's vitals were stable. On general examination pallor present, icterus present and bilateral pedal edema present. In abdominal examination, diffuse tenderness was present with hepatomegaly. Other systemic examinations were normal.

INVESTIGATIONS

Investigations include Hb- 6g/dl, TC- 14000 cells/cu.mm, ESR- 55 mm/hr, platelet count- 3.5 lakhs/cu.mm, Sr. Potassium- 3.2 meq/L, total protein- 6.0, albumin- 3.5. urine routine

examination and culture, stool routine examination and culture both yielded normal studies. Ultrasound abdomen showed multiple lesions in the liver. Contrast enhanced CT scan of abdomen showed hepatomegaly with multifocal liver abscess, the largest being in the 7th segment of liver. Multiple necrotic lymphadenopathy present. Acute thrombus present in bilateral common iliac, external iliac and common femoral veins seen. Ultrasound venous doppler showed thrombus in bilateral iliac, common femoral, superficial femoral, popliteal and great saphenous veins. Direct coombs test-negative. PT- 44.4, INR- 3.7, APLA-IgM- 3.20, APLA-IgG- 2.70, APLA-IgA- 1.9. Upper GI endoscopy was normal. AFP- normal.

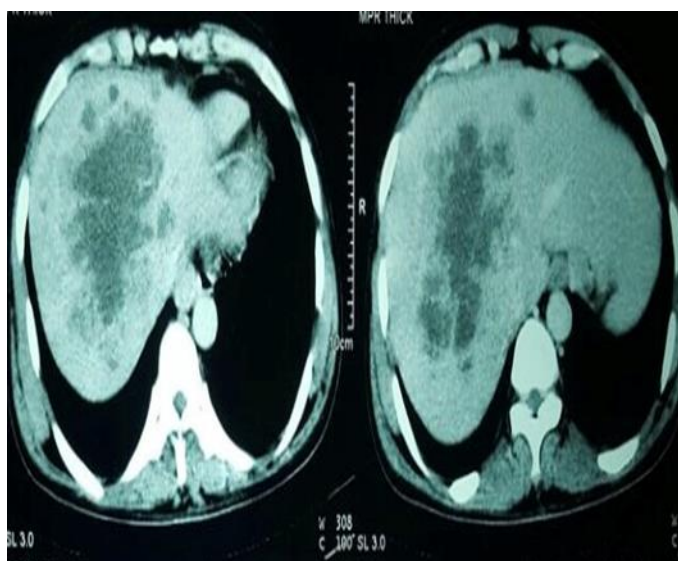


Figure 1: CT showing multiple liver abscess- Transverse cut

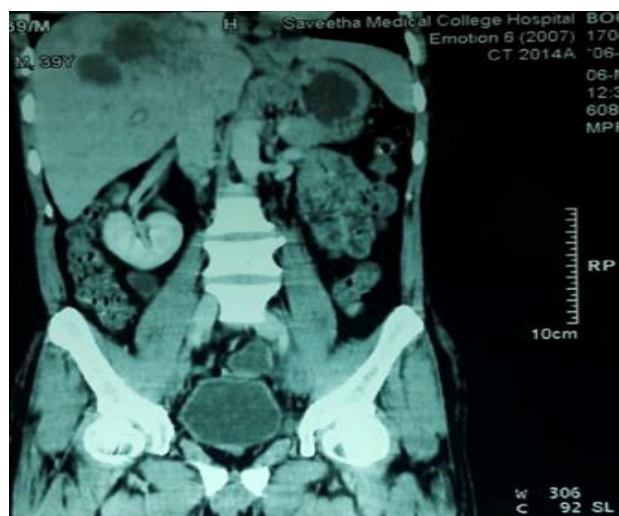


Figure 2: CT showing multiple liver abscess - Sagittal cut.

MANAGEMENT

Patient was put on antibiotics. Anticoagulants like heparin and acitrom were started. USG Guided pig tail catheter insertion done and liver abscess drained.

DISCUSSION

E. histolytica infection most commonly presents as amoebic colitis and liver abscess. Pyogenic liver abscess is caused by organisms like *Klebsiella pneumoniae*, *E. coli*, *Staphylococcus* and *Enterococcus*. [3, 5] Clinical features of a liver abscess would include fever, pain over the right upper quadrant or abdomen or epigastrium with/without radiation to right shoulder tip. On palpation enlargement of liver, liver tenderness, localized intercostal tenderness may be present [6]. Both ultrasonography and CT are widely used for the detection of liver abscess. The sensitivity of CT is far superior as it can visualize an impending perforation, ruptured abscess and obstruction of venous channels, although venous obstruction can be better visualized with a multiphasic CT angiography. Multiple lesions are seen in acute disease whereas in chronic cases solitary lesions are more common. [3] Right lobe of the liver is the most common site of abscess formation compared to the left. If abscess is present in caudate lobe of liver then aspiration of abscess using a catheter is tricky as the abscess is deep seated and surrounded by multiple vessels- in which case surgical approach is considered as last resort. [1]

Complications of liver abscess includes rupture into pleura through diaphragm or hematogenous spread to the lungs causing pleural effusion/pneumonitis, rupture into pericardium causing pericarditis/cardiac tamponade, intraperitoneal rupture causing peritonitis. [3, 4, 6] Other rare complications include inferior vena caval/hepatic/portal and deep vein thrombosis. [1] Venous thrombosis is a rare but life threatening complication as it can lead to pulmonary embolism. In this case study the patient is found to have multiple abscess involving the 7th and 8th segments of liver along with deep vein thrombosis of bilateral iliac veins, common femoral veins, superficial femoral veins, popliteal veins and the great saphenous veins. The patient did not have any risk factors pertaining to deep vein thrombosis like surgery, trauma, hospital/nursing home confinement, myocardial infarction, congestive heart failure, varicose veins, liver disease, central venous catheter/pacemaker, neurological disease with extremity paresis or malignant neoplasm. [7] The patient was treated with antibiotics and anticoagulants (heparin and acitrom). The abscess was drained using a pigtail catheter.

CONCLUSION

- Acute infection should be considered as a risk factor for venous thromboembolism.
- Deep vein thrombosis is a rare complication of liver abscess.

REFERENCES

- [1]. Kallichurum S. Amoebic Liver Abscess causing Caval Thrombosis, Pulmonary Embolic Disease and Cor Pulmonale. Three Case Reports. South African Medical Journal. 40(31), 1966, 740-42.
- [2]. Nayak HK, Kumar K, Saraswat VA, Pandey G, Mohindra S, Singh A. An Unusual Complication of Pyogenic Liver Abscess. Journal of clinical and experimental hepatology. 6(4), 2016, 337-8.
- [3]. Katzenstein D, Rickerson V, Braude A. New concepts of amoebic liver abscess derived from hepatic imaging, serodiagnosis, and hepatic enzymes in 67 consecutive cases in San Diego. Medicine. 61(4), 1982, 237-46.
- [4]. Ibarra-Pérez C. Thoracic complications of amoebic abscess of the liver: report of 501 cases. Chest. 79(6), 1981, 672-7.
- [5]. Rahimian J, Wilson T, Oram V, Holzman RS. Pyogenic liver abscess: recent trends in etiology and mortality. Clinical infectious diseases. 39(11), 2004, 1654-9.
- [6]. Adams EB, MacLeod IN. II. Amoebic Liver Abscess and its Complications. Medicine. 56(4), 1977, 325-34.
- [7]. Heit JA, Silverstein MD, Mohr DN, Petterson TM, O'fallon WM, Melton LJ. Risk factors for deep vein thrombosis and pulmonary embolism: a population-based case-control study. Archives of internal medicine. 160(6), 2000, 809-15.

- [8]. Smeeth L, Cook C, Thomas S, Hall AJ, Hubbard R, Vallance P. Risk of deep vein thrombosis and pulmonary embolism after acute infection in a community setting. *The Lancet*. 367(9516), 2006, 1075-9.
- [9]. Nordström M, Lindblad B, Bergqvist D, Kjellström T. A prospective study of the incidence of deep-vein thrombosis within a defined urban population. *Journal of internal medicine*. 232(2), 1992, 155-60

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