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Original Research Paper

General Surgery

A CASE REPORT ON LIVER ABSCESS CAUSING INFERIOR VENA CAVA THROMBOSIS

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KEYWORDS :

INTRODUCTION:

Amoebic liver abscess is the most common extra-intestinal manifestation of entamoeba histolytica infestation and it is associated with significant morbidity and mortality. The common complications of liver abscess include rupture into peritoneal cavity and pleural cavity, rarely vascular complications are seen in liver abscess in the form of thrombosis or compression resulting in either hepatic venous outflow obstruction or inferior vena cava obstruction. I am presenting a case of liver abscess where patient present with signs of IVC thrombosis and radiological confirmation of the IVC obstruction by thrombosis and /or external compression.

CASE REPORT:

A 30 year old male patient presented at civil hospital ahmedabad in emergency surgical department on 13th October 2018 with chief complain of pain in epigastric region and fever from 6 days and loose stool for 2 days. Vitals were pulse-86/m, blood pressure-130/86 mmHg. On physical examination abdomen mildly distended and mild epigastric tenderness present. In blood investigations ;HB-12 gm/dl,WBC-37000,PLT-91000, INR-1.52, S.BILIRUBIN-Total-5.98,direct bilirubin-1.52, s.creatinine-4.78. Chest xray within normal limit,abdominal xray within normal limit.USG (Abdomen+Pelvis)-liver appears enlarged in size and bright in echotextureand shows 144 cc sized partially liquefied abscess in right lobe.

On day of admission USG guided aspiration was done ,approximately 30cc encovy sauce pus aspirated, post tapping chest xray-normal .After 2 days of admission patient developed abdominal distention and bilateral pedal edema . Ryeles tube inserted and catheterization done, and further evaluation done. Chest x- ray showing bilateral cp angle blunted s/o-minimal pleural effusion. Expert USG done-s/o-280 cc solidified liver abscess and supra hepatic IVC thrombosis. CVTS reference done ,they advised conservative management with short acting heparin for 10 days and overlapped with tab warfarin on day 8. While starting heparin INR was 1.6 and after starting tab warfarin INR was 2.10 . Expert medicine reference done, they adviced CT pulmonary angiography+abdomen and pelvis. CT S/O-liver abscess extending in hepatic IVC causing thrombosis in hepatic IVC and right atrium. No evident pulmonary thrombo embolism. 2DECHO was normal. Patient shifted in ICU and kept on BIPAP mode for 2 days then shift to O2 mask .Pedal edema and abdominal distension reduced on day 8 of giving short acting heparin. Follow up USG(A+P) done s/o-Approx. 120cc sized predominantly solidified abscess is noted in right lobe of liver. Wall of IVC appears thickened and shows normal color flow within p/o- Recanalization of IVC thrombosis. Patient started orally and shift to ward. Patient was discharged in stable condition after 25 days with tab warfarin (5 mg) for 6 month according to INR report with proper advice to see for gum bleeding, bleeding per rectum .Follow up after 15 days patient was alright and INR was 2.3 .Then patient follow up every month and follow up USG(abdomen+pelvis) s/o-Recanalisation in IVC thrombosis.

Figure 1 Figure 2

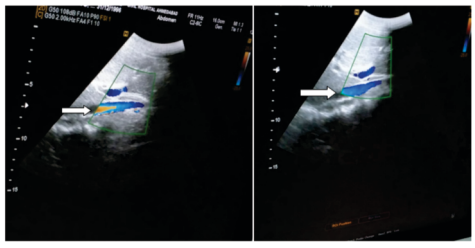
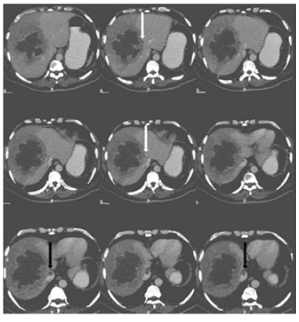


Figure 1:Showing ivc thrombosis
Figure 2:Showing recanalization

CT plates showing IVC thrombosis



DISCUSSION

Though amoebic and pyogenic liver abscesses are commonly encountered in india , IVC thrombosis secondary to liver abscess is quite rare . As IVC thrombosis are life threatening ,it requires high clinical suspicion followed by CECT in appropriate clinical setting. Rupture of the abscess into a vascular IVC ,predisposed to localized luminal thrombosis which may act as a source of pulmonary emboli and septicemia.Vascular complications in liver abscess should be considered in patients with fever,tender liver or signs of portal hypertension,more so in patients with diabetes.CECT is an excellent method for diagnosing liver abscess as well as its complications Ultra sonography may also be helpful in detection and characterization of venous extenson ,especially

for follow up. Echocardiography is useful in assessment in cases of intracardiac extension.Treatment includes conservative management with antibiotics, aspiration, anticoagulant.Venography is important when transluminal interventional treatment such as filter insertion or venoplasty is considered.

CONCLUSION:

Whenever a liver abscess is seen adjacent to a vascular channel or in the caudate lobe,it is imperative for the radiologist to look for vascular complications,as venous involvement may not be very symptomatic in some cases.Treatment of the abscess improves the recanalization of thrombosed vessels with anticoagulants. If abscess is drained then it improves the recanalization of thrombosed vessels even without anticoagulation.

REFERENCES

1. Lee KW, Kim HY, Kim CW, Kim YK, Kwon O, Kim MA et al. Hepatogastric fistula as a rare complication of pyogenic liver abscess. Clin Mol Hepatol 2017; 23(1): 87-90.
2. Lal H, Thakral A, Sharma ML, Kumar T. Liver abscesses with venous extension- rare complication of a common problem. Turk J Gastroenterol 2014; 25 (Suppl 1): 223-8.
3. Sarda AK, Mittal R, Basra BK, Mishra A, Talwar N. Three cases of amoebic liver abscess causing inferior vena cava obstruction, with a review of the literature. Korean J Hepatol 2011; 17(1): 71-5.
4. Sodhi KS, Ojili V, Sakhuja V, Khandelwal N. Hepatic and inferior vena caval thrombosis: vascular complication of amebic liver abscess. J Emerg Med 2008; 34(2):155-157.
5. Syed MA, Kim TK, Jang HJ. Portal and hepatic vein thrombosis in liver abscess: CT findings. Eur J Radiol 2007; 61(3): 513-9.
6. Maffiolo C, Novellas S, Chevallier P, Brunner P, Mourou MY, Bruneton JN. Thrombophlebitis of the hepatic veins: complication of a Klebsiella liver abscess. Clin Imaging 2006; 30(1): 63-5.
7. Wi JW, Cho EA, Jun CH, et al. Clinical characteristics and outcomes of pyogenic liver abscess in elderly Korean patients. Korean J Gastroenterol 2015; 66(1): 27-32.
8. Bagri N, Yadav D, Hemal A. Inferior vena caval and right atrial thrombosis: complicating pyogenic liver abscess. Indian Pediatr 2013; 50(7): 701-3
9. Nayak HK, Kumar K, Saraswat VA, Pandey G, Mohindra S, Singh A. An unusual complication of pyogenic liver abscess. J Clin Exp Hepatol 2016; 6(4): 337-38.