Case Series

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Abdominal Abcess

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Abstract

Our study aims on the management of pyogenic liver abcess, on the line management, choice of treatment. A case series of our experience with clinical and pathological correlation and type of drainage. The first line of management for liver abcess in intravenous antibiotic and imaging of the abcess and depending on the collection size and involved lobe of liver choice of intervention is taken. Either percutaneous needle aspiration or catheter drainage. Liver abcess is an emergency condition the choice of therapy depends on the patient status, for the management combined team work is needed from surgical and radiological side

Keywords: Liver; Abcess; PNA; PCD.

Introduction

Pyogenic Liver abcess is critical illness in surgical fields. Despite of the diagnostic technologies it is still associated with high morbidity and mortality [1,2,3].

Most common presenting symptoms are pain in abdomen, fever, nausea, vomiting, jaundice, breathlessness, loss of appetite. It depends on the position of abcess. The most common sign is right hypochondrial tenderness with guarding and hepatomegaly. Some of the patient may present with jaundice, pleural effusion [4].

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If still symptoms may land into multiple organ failure [3] aetiology may be due to bacterial or parasitic invasion of liver [5].

The management is based on appropriate antibiotic therapy and interventional procedure [6].

In this report we describe six clinical cases of large multiloculated liver abcess in adult male patients. The aim of our study was to determine etiopathology, clinical, radiological, and bacteriological character of the liver abcess.

Case Series

Case I

Thirty-five year old male has been transferred to our opd with fever and pain in the right hypochondrium since last 6 days. He was heavy smoker and alcoholic. His general physical examination show tachycardia >110bpm, fever 39^{0}C, respiratory rate >30 breath's/min. His abdominal examination show right hypochondrium tenderness and liver enlargement.

Immediately initiation of antibiotic therapy (metronidazole and cefuroxime) started and pain killer are started. We kept patient on liquids orally. Emergency sonography abdomen was done which revealed a large (8x5 cm). Single liver abcess in the right lobe laboratory findings of the patient were white blood cell 22000/ul and Aptt -60.65, INR-1.2.

Patient INR was 1.2 so we gave inj.vit K for 3 days and repeated the INR which came to be normal. Patient was sent to interventional radiology unit and usg guided percutaneous catheter drainage was done. A large amount of pus was drained and sent for culture. Culture reports demonstrated no growth. After 10 days

drainage, drain was removed and patient was discharged fully recovered with this management.

Case 2

Thirty year old male came to the opd with pain abdomen and fever with history of nausea since last 3 days. He was alcoholic but left since last 2 months. His general physical examination show fever 39.C and respiratory rate >30 breaths/min, pulse -80 beats/min.his abdominal examination show tenderness in the right hypochondrium. Depending on the clinical examination we started antibiotic therapy for the patient and to rule out acute cause emergency sonography was done it revealed loculated collection noted in the right lobe of liver (8x5 cm), laboratory findings of the patient show white cell count 15000/ul and INR 1.4. Patient INR was 1.4 so we gave inj vit K for 3 days and INR repeated came to be normal. Patient was undergone percutaneous catheter drainage. Large amount of fliud drained sent for culture. Report came to be no growth. After 5 days drain was removed. Patient was fully recovered with the management.

Case 3

Thirty-eight year old male came to opd with fever and pain in the abdomen, fever, nausea, with vomiting since last 2 days. He was alcoholic and smoker. Pain was severe since last night. Patient also given history of breathlessness since last 2 days. His general physical examination show pulse =100bpm, fever> 39^0C, respiratory rate >30 breath's/min. patient seems to be acute on abdominal examination show right hypochondrium tenderness & fullness, and liver is palapable. Emergency sonography abdomen was done which revealed a large (10x8 cm) liver abcess. Patient CT scan done on emergency suggestive of multiloculated liver abcess in the right lobe 10x9cm. Patient laboratory findings of the patient were white blood cell 22000/ul and INR-2.1.

CT guided percutaneous catheter drainage was done large amount of fluid drained sent for culture. After 10 days drain was removed. Patient fully recovered with the management.

Case 4

Forty year old male came to opd with severe abdominal pain,fever, nausea, with vomiting. He was haemodynamically stable with no other complaints. On physical examination abdomen was slightly distended. Sonography abdomen was done which revealed a large (8x9 cm) multilocular liver abcess in segment 7-8 of right lobe. The patient has undergone usg guided aspiration 15cc pus was drained and sent for culture. Following this patient was started antibiotic therapy, (metronidazole and cephalosporin). After drainage the patient clinical improvement.

Case 5

Twenty-eight year old male came to opd with abdominal pain. No other complaints. He was haemodynamically stable with no other complaints. On physical examination abdomen was slightly distended. Contrast CT scan abdomen showed multilocular liver abcess in segment 7-8 of right lobe. The patient has undergone CT guided aspiration was done. Pus was drained and sent for culture. Report for the culture came to be negative. Following this patient was started antibiotic therapy. His hospitalization course was uneventful.

Case 6

Twenty-five year old male came to opd with abdominal pain. No other complaints. He was haemodynamically stable with no other complaints. Patient with normal general & physical examination. Patient gave history of liver abcess aspiration done outside 15 days back. So to rule out recurrence of the abcess, emergency sonography was done, showed collection of 8x9.5cm in the right lobe of liver multiloculated with liquification. Emergency CT abdomen suggestive of liver abcess. Previously aspiration was done so CT guided percutaneous catheter drainage was done. A large amount of purulent fluid was done . A large amount of purulent fluid was drained and culture and culture's demonstrates no growth.

After ten days drainage was removed .Antibiotic therapy was adjusted accordingly. patient was recovered with management.

Discussion

Pyogenic liver abcess primary aetiology will be biliary tract pathology [7,8] rarely it may developed due to appendicitis, diverticulitis or colonic perforation. Clinical features are similar upper quadrant pain, fever anorexia and fatigue [3] most common laboratory abnormality was altered leucocytic count for the diagnosis sonography play an important role [9,10]. X ray chest showed elevated dome of right hemidiaphragm and pleural effusion is some cases [11]. Most common site for abcess is

right lobe. There is blood supply to right hepatic lobe is more right portal vein [12].

In our study right lobe is involved most of the case for the management percutaneous needle aspiration in combination with antibiotics is safe treatment and is the first line management [13] needle aspiration is suitable abcess>5cm and location of the abcess [14].

Percutaneous catheter drainage has a significantly higher rate in the group showed by razak et al [15]. Both the modalities for liver abscess gave satisfactory results. But the needle aspiration was cheap, less invasive and lees hospital stay was there [16]. Most culture of showed kleibseilla organism [17,18]. Most of the time culture were sterile (in our study it was came sterile, no growth). This could be due to widespread use of early antibiotics [19].

Photos

Conclusion

In our study percutaneous catheter drainage and aspiration both modalities were helpful. But both procedure are costlier are costlier and requires expertise in the hospital.

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