

## Management of pyogenic liver abscess

Patient with pyogenic liver abscess usually presented with fever, rigor, sweating, and toxemia together with right hypochondrial or lower chest pain.

History may reveal the cause of the pyogenic liver abscess as follow:

- Ask for previous attack of cholangitis (The commonest cause of pyogenic liver abscess). Cholangitis caused by bile duct obstruction may result in multiple liver abscesses. The likely organisms here are E.coli & other gram-negative bacilli.
- The patients may have history suggestive for colonic diverticulitis as left lower abdominal pain, fever, & constitutional symptoms; or the patient may have history suggestive of acute appendicitis.
- Both of suppurative appendicitis & colonic diverticulitis may induce septic thrombophlebitis of the portal vein radicals, consequent portal pyemia & multiple liver abscesses.

Here, streptococcus & anaerobes are the common organism.

- The patient may have history of bacterial endocarditis, tonsillitis intravenous drug abuse or osteomyelitis. They constitute hematogenous source of liver abscess.

Examination may reveal toxic patient on general examination with sweating, pallor, tachycardia, & fever.

Chest examination may reveal poor air entry on the right side due to pleural effusion or pleural empyema & lung collapse.

- Abdominal examination usually reveals tender hepatomegaly.
- Sometimes, the features of the causative lesions are evident (e.g. Charcot's triad of cholangitis or the pain of acute appendicitis).
- Imaging studies as **ultrasound & CT scan** can show the abscess as multiloculated cystic lesion. They also can tell accurately the site, size & the number of the abscesses.
- Laboratory tests may show leukocytosis, anemia, high ESR, low serum albumin, high alkaline phosphatase & transaminase level.
- Elevated serum bilirubin because of cholangitis or multiple liver abscesses.
- When pyogenic liver abscess is diagnosed, treatment is proceeding.
- The treatment of pyogenic liver abscess is with antibiotics and ultrasound guided aspiration. First line antibiotics will be penicillin, aminoglycoside & metronidazole or

cephalosporin with metronidazole. Percutaneous drainage is done under local anesthesia. The abscess is aspirated & then a tube drain is inserted.

- Open surgical drainage is another option that also allows dealing with an intra abdominal cause. Whenever possible, the abscess is evacuated through an extra serous approach.
- A tube drain is left in place until the discharge stops.

Broad spectrum antibiotics are used till the results of pus culture & sensitivity is obtained.

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