

Case	(737) Gas liver abscess secondary to necrotizing fasciitis in immunosuppressed patient
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CASE PRESENTATION

A 62-year-old male who arrives to the Emergency Department with a few hours history of high temperature (38°C maximum) and feeling of dysthermia. Refers diffuse headache, cough and mild secretions, as well as general malaise and pain in the lower left extremity. No abdominal pain or urinary symptoms. The patient is immunosuppressed due to a heart transplant.

Blood test shows markedly elevated inflammatory response with a white blood cell count of 32,600/l (68% neutrophils) and C-reactive protein level of 32,5 mg/dl. His AST level is 390 U/l and ALT level is 350 U/l, indicating liver dysfunction. Procalcitonin is high at 28,6 ng/ml, suggesting sepsis.

Abdominal CT scan reveals a gas liver abscess located in the right hepatic lobe with distal aerobilia and the presence of large amount of gas in the subcutaneous and muscular planes of the left buttock and thigh in relation to necrotizing fasciitis.

Positive blood cultures for *Clostridium septicum* are isolated. The patient shows rapid fatal progression with septic shock and death with no time for treatment.

DISCUSSION

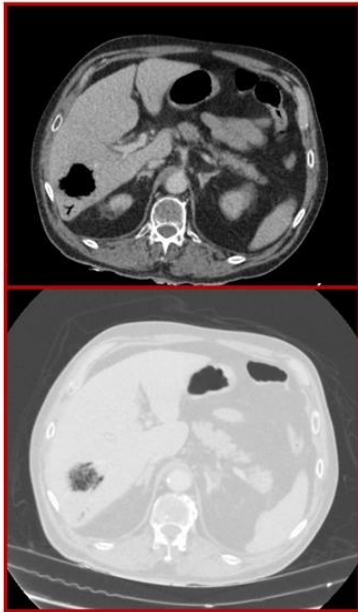
Gas-forming liver abscesses account for 7-24% of pyogenic liver abscesses. They are prone to septic shock and rupture. The fatality rate (27-30%) is higher than that of non gas-forming liver abscesses (2-12%).

Although usually caused by gas-producing fermenting bacteria such as *Klebsiella pneumoniae* or *Escherichia coli*, *Clostridium septicum* has been identified as a cause of gas-forming liver abscesses in haematological diseases, immunosuppressive states, diabetes and malignancies.

Clostridium septicum infection is rare. There is great deal of variation in the way it presents, from simple contamination of a wound to fulminant septic processes such as gas gangrene, muscle necrosis or abscesses in solid organs.

CONCLUSION

Clostridium septicum infection should be considered in the differential diagnosis of a gas-forming liver abscess in the context of haematological diseases, immunosuppressive states, diabetes and malignancies, as although rare, it is associated with a high mortality rate.



CT Images axial plane, with abdominal and lung windows: gas abscesses in the right hepatic lobe with distal aerobilia



CT Image sagittal plane: large amount of gas in subcutaneous and muscular planes of the lower left extremity

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