Emphysematous Cholecystitis: Imaging Diagnosis of an Emergent Condition

Colecistite Enfisematosa: Diagnóstico por Imagem de uma Situação Urgente

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A 54 year-old diabetic female, with granulomatosis with polyangiitis under immunosuppression and chronic kidney disease in haemodialysis, presented with abdominal pain and shock. The abdominal radiograph (Fig.1A) showed gas within the gallbladder wall and lumen and a pneumoperitoneum, findings confirmed by computed tomography scan (Fig.1B). A perforated emphysematous cholecystitis was diagnosed and emergency cholecystectomy performed, with isolation of Clostridium perfringens (C. perfringens), but the patient did not overcome the septic shock and died two days later.

Emphysematous cholecystitis is difficult to distinguish clinically from uncomplicated cholecystitis, hence the diagnosis relies on imaging. Careful examination of the plain film may diagnose this severe and rare entity. Two factors may have concurred to its development: cystic artery compromise (in the setting of diabetes and renal failure) and immunosuppression. Gas-forming organisms (as primary or secondary infection) are frequent, with C. perfringens identified in 50% of cases. The outcome of this high mortality condition depends on immediate diagnosis and therapy.

REFERENCES