

Case	(272) Adenovirus hepatic abscess in an immunocompromised patient
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CASE PRESENTATION

A 55 year-old-man with an haploidentical hematopoietic stem cell transplantation (HSCT) performed five months before to treat an acute myeloid leukemia (AML) was hospitalised with a CMV infection, with more than 4 million copies.

Gastrointestinal infection with adenovirus was also diagnosed. Due to worsening dyspnoea and hepatic enzyme alteration an urgent thoracoabdominal CT was requested. On CT ground glass opacities and interstitial reticulation was noted but what was more surprising was the presence of multiple small hypoenhancing lesions situated on the periphery of the liver parenchyma (circles on images A and B).

Those lesions were not seen on a recent CT performed just one month before (image C). Although the diagnosis of viral liver abscesses was proposed a liver core biopsy was performed to rule out AML relapse with hepatic involvement. On the biopsy a submassive necrosis with peripheric microabscesses was described, with nuclear and cytoplasmic inclusions, with a definitive diagnosis of adenovirus expression on immunohistochemistry techniques.

Small hemoperitoneum was seen on a latter scan (not shown). Both adenovirus and CMV were intensively treated and antibiotic prophylaxis was also established but the patient rapidly deteriorated, requiring ICU mechanical ventilation and died soon after. On autopsy the core biopsy findings were sustained (image D) and adenovirus related necrosis was also found in other tissues.

DISCUSSION

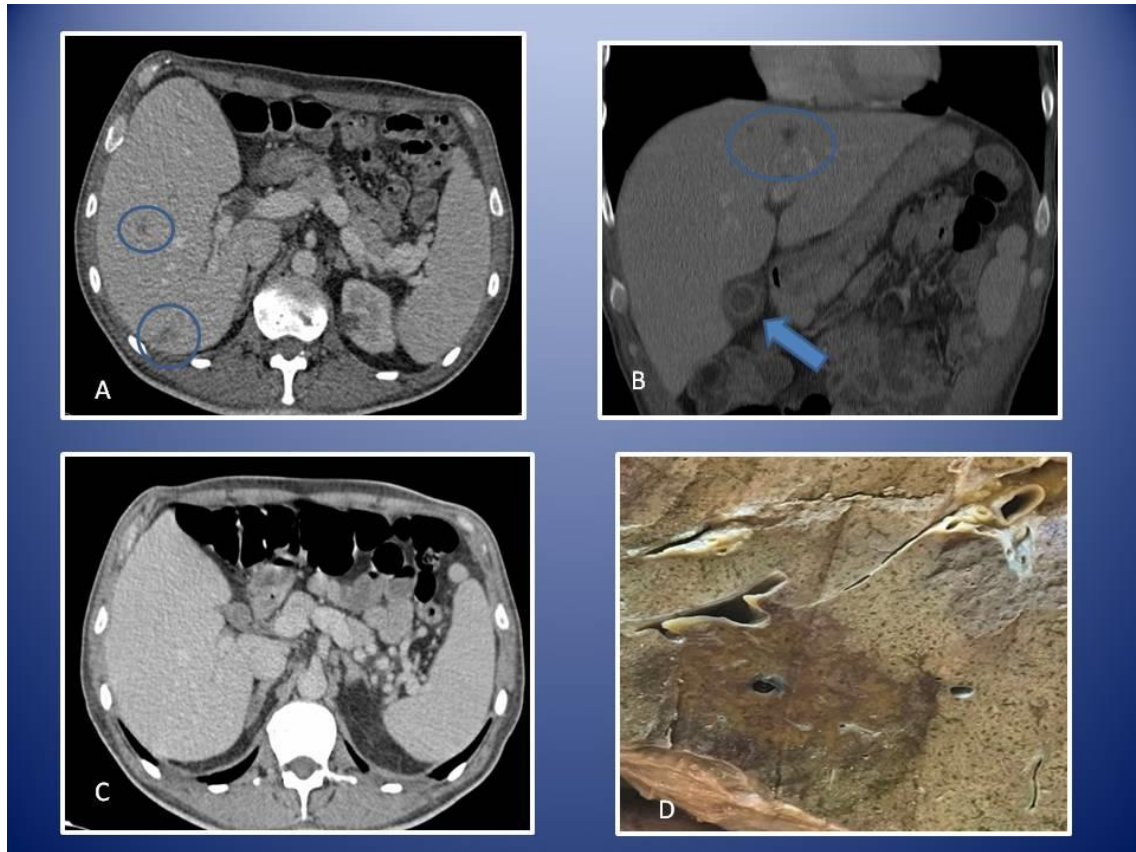
Viral involvement of the liver is not uncommon, but normally findings are inespecific and CT is used to rule out other pathologies. Normal liver, hepatomegaly, periportal edema or uneven enhancement may be seen in viral hepatitis.

Low attenuation regions may appear. Severe gallbladder edema with a non distended gallbladder is seen in up to 70% of viral hepatitis, as in our case (image B), and can be an ancillary extrahepatic finding that may support the diagnosis of viral hepatitis. Adenoviral disease can be diagnosed by histology but liver biopsy is difficult to perform due to the high risk of bleeding.

To our knowledge only a few cases of adenoviral hepatitis have been described and only in some cases the mass like necrosis has been found, all of them in immunocompromised patients with solid organ or HSCT

CONCLUSION

Adenoviral hepatitis should be considered as a possible cause of liver injury in HSCT recipients with multiple low-density lesions of the liver although such findings are not specific to adenovirus infection.



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