

Fosfomycin-induced liver injury: a case report and literature review

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Abstract

Fosfomycin is an antibiotic often used to treat urinary tract infections (UTIs) with only rare transient hepatotoxicity. We present a case of fosfomycin-induced liver injury and describe the histopathologic findings on biopsy. A 64 year-old female patient with no prior liver disease or risk factors was started on fosfomycin as prophylaxis for recurrent UTIs. Within a week of her first dose she presented with fatigue, jaundice, and mixed liver enzyme elevation. Clinical workup for acute liver injury was unremarkable, and biopsy showed panacinar and portal necroinflammation with predominantly lymphocytic infiltrate and cholestasis. This was thought to be likely related to fosfomycin exposure. While liver enzymes trended down, bilirubin initially remained elevated. However, within three months the patient achieved clinical and biochemical recovery. Only two other reports of fosfomycin-induced liver injury requiring biopsy were found. Both developed acute cholestatic hepatitis within days of exposure, and subsequent biopsy similarly showed lymphocytic necroinflammation. Although one patient initially developed acute liver failure, both recovered fully within few months. Overall, these cases suggest likely an idiosyncratic or immune-mediated liver toxicity of fosfomycin which is typically self-limited with rapid recovery. Liver biopsy may be useful in confirming the diagnosis.

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