

Penicillin G-induced hemorrhagic cystitis

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To the Editor,

We read the article by Kim et al. [1] with great interest. Drug-induced hemorrhagic cystitis is a rare complication, especially during antibiotic therapy. Penicillin G-induced hemorrhagic cystitis is not a well-known pathology during treatment, but clinicians may suspect it if there are signs of cystitis, such as frequency, urgency, hematuria, or dysuria. Pyuria and hematuria on the urine analysis with basophilia on a complete blood count support the diagnosis of penicillin G-induced hemorrhagic cystitis.

When hemorrhagic cystitis is diagnosed, the first step must be identification of the cause. Drugs seemed to be the most likely cause in the present paper. However, parasitic diseases such as schistosomiasis and echinococcosis can also induce hemorrhagic cystitis, and basophilia is an associated sign [2]. When clinicians suspect a parasitic cause of hemorrhagic cystitis, it is important to clarify the diagnosis histopathologically. Such histopathological examination can show granulomatous lesions with typical eggs in schistosoma or echinococcus infestations [3].

The most important aspect of management of drug-induced hemorrhagic cystitis is to identify and eliminate the causative agent. The most reliable test is the drug lymphocyte stimulation test (DLST). The DLST showed positivity for various drugs in several studies of drug-induced hemorrhagic cystitis. Ad-

ditionally, the urinary β 2-microglobulin and N-acetyl- β -D-glucosaminidase levels were assessed to achieve a precise diagnosis in the same study [4]. To the best of our knowledge, if drug-induced hemorrhagic cystitis occurs during multidrug treatment, the best way to identify the causative drug is to discontinue the drugs one by one.

Keywords: Drug-induced hemorrhagic cystitis; Hemorrhagic cystitis; Drug lymphocyte stimulation test

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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