Abstract

Objectives: Therapy with protease inhibitors is commonly used in patients infected by human immunodeficiency virus (HIV). 20% of the administered dose is excreted by the kidney, and when alkaline urine is present, indinavir may crystallize forming stones and patients may experience renal colic due to this fact. Methods: Between January 1998 and June 2005, 26 patients receiving antiretroviral treatment with protease inhibitors received care at our hospital because of renal colic or flank pain. All of them underwent physical examination, echography and urography as well as blood and urine analysis. Patients were treated ambulatory excepting those in whom oral analgesics were insufficient to control the pain. Results: All patients had been treated with indinavir for longer than 12 months. They represented 4% of all patients treated with the recommended dose of Crivixan®. Most of them presented flank pain, associated in most cases to microhaematuria. Five of them required hospitalization because of persistent pain in spite of endovenous analgesia. Imaging tests (echography and urography) showed functional delay of the kidney (2 cases), ureteral stasis (4 cases) and little lithiasic concretions of mild radiologic density (5 cases). Urinalysis revealed suggestive cristaluria and alkaline pH. All patients required hidratation and analgesic treatment. In 3 patients indinavir dose was reduced, it was retired in another one, and 100mg of rito-navir were added in another one. Unsuccessfly ureteral cateterization was tried in one patient. All of them presented symptomatic improvement. Conclusions: We ought to know the capability of indinavir to form urolithiasis in HIV patients treated with protease inhibitors, although its use is decreasing along time. Prevalence of urolithiasis in these patients seems to be higher as length of treatment becomes longer. Metabolic alterations in urine have been proved in these patients, contributing to a higher incidence of lithiasis than in general population.

Keywords

FLithiasis. Indinavir. HIV.