

Letter to the Editor**Interstitial cystitis symptoms associated with ketamine abuse: The first Japanese case**

Ketamine, an *N*-methyl-D-aspartate receptor antagonist, is used for general anesthesia in medical and veterinary procedures. Abuse of ketamine as a recreational drug has become more and more popular among youngsters. This is not only a social problem, but also a urological one; ketamine abusers are known to develop lower urinary tract symptoms (LUTS) that resemble interstitial cystitis/hypersensitive bladder syndrome (IC/HBS).^{1,2} The first report of IC symptoms with ketamine abuse came from Canada, followed by reports from Belgium, Hong Kong, Taiwan and the US,³ where ketamine abuse is allegedly common. Although ketamine is also abused as a recreational drug in Japan, no case of ketamine-associated IC/HBS has been described to date. Here, we report the first case.

A 51-year-old man was referred to our hospital in April 2010 with a complaint of urgency and discomfort in the lower abdomen persisting for more than 10 years. He had already received anticholinergics and alpha-adrenergic receptor blockers for diagnoses of overactive bladder, benign prostatic hyperplasia, and chronic prostatitis; however, no therapies were successful. Physical examination showed no specific findings and urine analysis was normal, with negative results on urine culture and cytology. Ultrasonography and computed tomography detected no specific findings that may have accounted for the LUTS. The urinary frequency was more than 20 times per day and the single voided volume was, on average, 80 mL. The scores on the O'Leary and Sants⁴ symptom index and problem index were 8 and 11, respectively. The visual analogue scale for pain scored 4. Suspecting IC/HBS, we performed cystoscopy at the outpatient clinic under topical anesthesia with lidocaine for observation and hydrodistension of bladder mucosa. The patient complained of mild discomfort but no pain on instillation of normal saline. Maximum bladder capacity was reduced to 250 mL. Upon drainage of the saline, mild glomerulation and mucosal bleeding appeared diffusely in the bladder mucosal lumen (Fig. 1), indicating a diagnosis compatible with IC.⁵ Detailed interview revealed the patient's past history of ketamine abuse for almost 30 years. During this period he had experienced occasional bladder pain and gross hematuria. These symptoms are most commonly reported in ketamine abusers with LUTS.^{1,2} At his first presentation, the patient had been consulting a psychiatrist and had quit abusing ketamine for 6 months. After 6 months follow-up without specific treatment, the patient's urinary frequency was reduced to 10 times per day and none at night, with the average single voided volume increasing to 150 mL. The scores on the O'Leary and Sants questionnaire

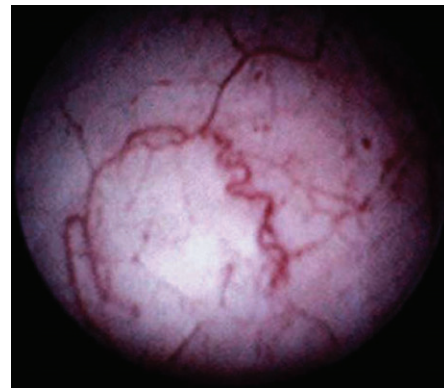


Fig. 1 Glomerulation is observed on drainage of saline.

indicated a symptom index of 3 and a problem index of 3, with score of 0 for bladder pressure or discomfort.

To our knowledge, this is the first Japanese case report of IC symptoms associated with ketamine abuse. The patient's medical course suggests that discontinuation of ketamine and hydrodistension of the bladder may result in spontaneous improvement of the symptoms, even after long-term exposure to the agent. Ketamine abuse should be included in the differential diagnoses for those presenting with LUTS suggestive of IC.

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Conflict of interest

None declared.

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