

Clinical profile of lower urinary tract changes and urinary marker measurements in young adults using ketamine

Executive Summary:

Ketamine abuse is becoming an increasing concern worldwide. Besides the neuro-cognitive complications, there are also reports on the associated voiding dysfunction in ketamine-abusers. The urinary tract problems range from irritative bladder symptoms to structural changes.

With the support from the Beat Drug Fund programme, we have improved our fast-track clinic service with ultrasound assessment to assess the effect of ketamine abuse on the urinary system. Also we have explored the possible structural and functional changes, as well as urinary marker changes, in these ketamine abusers. In this study, we have analysed the results from 47 subjects. We found that it is difficult to quantify the amount of ketamine abuse and there were also a wide variety of symptoms in these patients. We need to develop better assessment tools to assess the extent of problems in these patients. We also noted that there were changes in the urinary markers NGF and PGE2 in patients with ketamine abuse might be related to the duration of ketamine abuse. Also there were a weak correlation of the urine marker level and the symptom severity. This might give insight into the underlying pathophysiology of the problems. However, further studies are needed to confirm this initial observation.

We also take this opportunity to update the frontline staff, including nurses, urology specialists and family physicians on this clinical problem. Prompt and proper referral and management of ketamine abusers with urinary tract symptoms may also serve a good contact point to these patients, and maybe able to allow an early intervention and abstinence of the drug abuse.