

## RELATIONSHIP BETWEEN DURATION OF KETAMINE EXPOSURE AND URODYNAMIC PARAMETERS IN KETAMINE EX-USERS

### Hypothesis / aims of study

We aimed to compare the urodynamic parameters in female ex-ketamine users, hypothesizing urinary parameters will worsen with longer time of ketamine usage.

### Study design, materials and methods

A cross-sectional cohort study was conducted on 24 ex-ketamine users. They underwent standard urodynamic study with their peak flow rate of voiding, first sensation, normal sensation, maximum detrusor pressure at filling and maximum bladder capacity measured. These parameters were compared between those who had ketamine usage for less than 36 months and those used more than or equal to 36 months.

### Results

Twenty four female ex-ketamine users, 8 and 14 used ketamine <36 months and  $\geq 36$  months, have undergone urodynamic study including cystometry and uroflowmetry. Their mean age was  $20.8 \pm 2.7$ . Their mean time of ketamine usage was  $61 \pm 35.5$  months (range from 18 to 120 months) and all of them have stopped using ketamine for  $7.5 \pm 4.7$  months at the time of study.

The urodynamic parameters in the two different groups were shown in Table 1. There was no significant difference between the peak flow rate, first sensation and normal sensation to void and the maximum bladder capacity among these two groups.

### Interpretation of results

There was no significant difference in all the urodynamic parameters for women who had longer time in exposure of ketamine ( $\geq 36$  months) than those with shorter period (<36 months). The effect of ketamine in urodynamic parameters was not shown to be related to the duration of ketamine exposure.

### Concluding message

Ex-ketamine abusers in our study did not demonstrated significant abnormal urodynamic parameters. There is no significant different in these parameters among those with usage of ketamine more than or equal to 36 months.

### Table

Table 1. Relationship between duration of ketamine usage and urodynamic parameters.

	Ketamine usage < 36 months N = 8	Ketamine usage ≥36 months N = 14	P-value	Total
Peak Flow Rate (ml/sec)	17.3(5.9)	15.7 (8.4)	0.78	16.5 (7.4)
First sensation to void (ml)	144.4 (79.5)	142.7 (81.5)	0.83	141.1 (76.4)
Normal sensation to void (ml)	170 (99.3)	190.7 (74.1)	0.97	184.4 (79.9)
Max. bladder capacity (ml)	261.7 (89.8)	248.9 (85.6)	0.21	256.3 (83.1)

\*Value is presented in mean (standard deviation)

<b><i>Specify source of funding or grant</i></b>	<b>None</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Joint The Chinese University of Hong Kong - New Territories East Cluster Clinical Research Ethics Committee</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>