

## PAINFUL BLADDER AND URINARY TRACT PATHOLOGY ASSOCIATED WITH LONG TERM KETAMINE USE

### Hypothesis / aims of study

The use of ketamine as a recreational drug in the UK is increasing however little is known about the effects of regular use. Case series in Canada and Hong Kong have described severe urinary tract pathology associated with chronic ketamine use

### Study design, materials and methods

Patients with a history of chronic ketamine use and urinary tract symptoms were referred to urological services in the South West UK for evaluation. Patients underwent physical examination including cystoscopy and bladder biopsies. An on-line survey was sent to all UK BAUS members and trainees

### Results

20 patients with a history of regular ketamine use presented with symptoms comprising haematuria, suprapubic pain, frequency and urgency. Cystoscopy revealed bladder inflammation. Biopsy samples revealed haemorrhagic cystitis. Complications included retractable pain necessitating cystectomy or catheter insertion for symptomatic relief and progressive urinary tract damage leading to ureteric stricture and renal impairment. In a number of patients symptoms reduced once ketamine use has ceased however effects may be irreversible or even progressive. Survey of BAUS members revealed similar cases in all regions of the UK.

### Interpretation of results

Chronic high dose ketamine usage results in urothelial inflammation, painful bladder and loss of capacity.

### Concluding message

Urinary tract pathology associated with chronic ketamine use is an emerging problem in the UK. Whilst the pathological course damage to the urinary tract is unknown the impact on quality of life is severe. Further work is needed to evaluate the pathological mechanism of ketamine, clinical course of such pathology and to establish the prevalence of such symptoms amongst ketamine users.

### References

1. Shahani et al. Urology 2007;69:810-812, Chu et al. Hong Kong Med J 13 (4):311-313

<b><i>Specify source of funding or grant</i></b>	<b>Nil</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>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>Case study</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>