



香港大學李嘉誠醫學院  
內科學系  
香港大學及北區醫院聯合研究

長期濫用氯胺酮(K仔)  
會損害膽道系統

記者招待會  
2018年4月25日

由香港特區行政區禁毒基金資助



## 講者

香港大學李嘉誠醫學院  
內科學系臨床副教授  
司徒偉基醫生

北區醫院  
外科副顧問醫生  
麥肇敬醫生



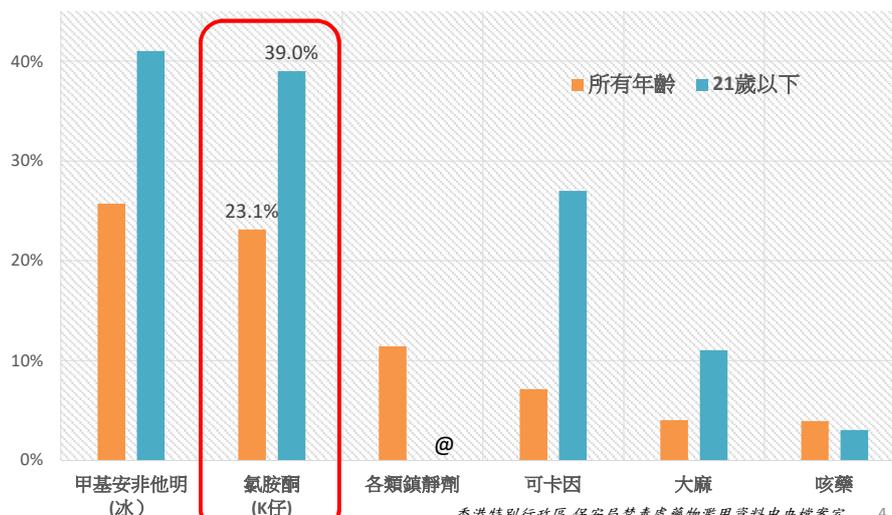
## 香港藥物濫用情況 – 2015年

- 被呈報吸毒者: 8,598人
  - 平均年齡: 38歲
- 首次被呈報吸毒人數: 2,103人
  - 平均年齡: 29歲
- 首次被呈報吸毒者毒齡: 5.8年
- 首次吸毒年齡:
  - 20歲或以下: 77%
  - 15歲或以下: 35%

香港特別行政區 保安局禁毒處  
藥物濫用資料中央檔案室  
第65號報告書2006-2015



## 香港藥物濫用情況 – 2015年

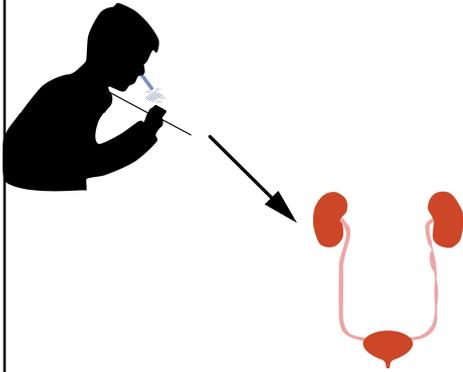


@數據並未公布

香港特別行政區 保安局禁毒處藥物濫用資料中央檔案室  
第65號報告書2006-2015 4



# 除了影響膀胱功能 「索K」也會影響膽道系統



Research Article  
Cholelithiasis and Autoimmune Diseases

JOURNAL OF  
HEPATOLOGY

## Magnetic resonance cholangiogram patterns and clinical profiles of ketamine-related cholangiopathy in drug users

Wai-Kay Seto<sup>1,2,3</sup>, Siu-King Mak<sup>2,3</sup>, Keith Chin<sup>1,3</sup>, Yanut Vardhanabhuti<sup>1</sup>, Ho-Fai Wong<sup>1</sup>, Heng-Tat Leong<sup>1</sup>, Paul S.F. Lee<sup>1</sup>, Y.C. Ho<sup>1</sup>, Chi-Kei Lee<sup>1</sup>, Ka-Shing Cheung<sup>1</sup>, Man-Fung Yuen<sup>1</sup>, Wai K. Leung<sup>1,4</sup>

<sup>1</sup>Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong; <sup>2</sup>Department of Surgery, North District Hospital, Hong Kong; <sup>3</sup>Department of Diagnostic Radiology, The University of Hong Kong, Hong Kong; <sup>4</sup>Department of Radiology, North District Hospital, Hong Kong; <sup>5</sup>Department of Radiology, Queen Mary Hospital, Hong Kong; <sup>6</sup>Department of Psychiatry, Queen Mary Hospital, Hong Kong

**Background & Aims:** Recreational ketamine use has emerged as an important health and social issue worldwide, and can result in associated with biliary tract damage, the clinical and radiological profiles of ketamine-related cholangiopathy have not been well described. **Methods:** Chinese individuals who had used ketamine recreationally at least twice per month for six months in the previous two years via a territory-wide community network of charitable organizations, lacking substance abuse, were recruited. Magnetic resonance cholangiography (MRC) was performed, and the findings were interpreted independently by two radiologists, with the findings analyzed in association with clinical characteristics. **Results:** Among the 243 ketamine users recruited, 207 (74.8%) were recruited. The mean age and ketamine exposure duration were 28.1 (±5.1) and 183 (±77) years, respectively. A total of 159 (63.8%) had biliary tract anomalies on MRC, categorized as diffuse ectopic dilatation (n=71), fusiform dilatation (n=64), and intraluminal ductal changes (n=22) with no radiological abnormalities. Serum alkaline phosphatase (ALP) level (odds ratio [OR] 1.087; 95% CI 1.002–1.182), lack of concurrent recreational drug use (OR 1.99; 95% CI 1.11–3.58), and prior emergency attendance for urinary symptoms (OR 1.95; 95% CI 1.01–3.79) had high predictive values for biliary anomalies on MRC. Among non-ketamine users, ALP level had an AUC of 0.808 in predicting biliary anomalies, with an optimal level of 1133 IU/L having a positive predictive value of 88.6%. Cholangiographic anomalies were reversible after ketamine abstinence, whereas decompensated cirrhosis and death were possible after prolonged exposure. **Conclusions:** We have identified distinctive MRC patterns in a large cohort of ketamine users. ALP level and lack of concurrent drug use predicted biliary anomalies, which were reversible after abstinence. The study findings may aid public health efforts in combating the growing epidemic of ketamine abuse.

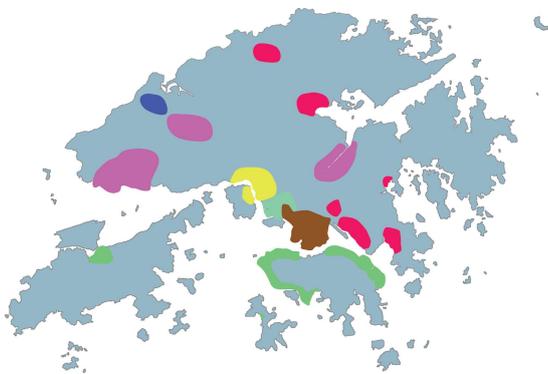
**Lay summary:** Recreational inhalation of ketamine is currently an important substance abuse issue worldwide, and can result in associated with biliary system as demonstrated by magnetic resonance imaging. Although prolonged exposure may lead to further clinical deterioration, such biliary system anomalies might be reversible after ketamine abstinence. **Introduction:** Recreational inhalation of ketamine is emerging as a major global social and health issue.<sup>1–7</sup> Although ketamine, an N-methyl-D-aspartate receptor antagonist, has medical uses in anesthesia and chronic pain control, its highly addictive nature has led to a massive increase in recreational consumption worldwide. Because of the ease of production and low cost, the non-medical use of ketamine is increasing especially in East and South-East Asia, with its lifetime prevalence in the general population ranging from 0.5% to 2.0%,<sup>8</sup> comprising up to 70% of total recreational drug users in these regions.<sup>9</sup> The self-reported recreational use of ketamine in Western countries, including the UK, Australia, and Canada, is also increasing.<sup>10</sup> From 2008 to 2014, law enforcement seizures of ketamine worldwide increased by more than fivefold.<sup>11</sup> Long-term heavy use of ketamine is associated with different medical problems, including cognitive impairment and psychological issues.<sup>12</sup> Damage to the urogenital system is also well documented, with many ketamine users developing a large variety of urinary problems, ranging from lower urinary tract symptoms and bladder occurrence to hydronephrosis, renal impairment, and papillary necrosis.<sup>13</sup> Urinary tract damage seemed reversible in a proportion of patients who ceased ketamine use.<sup>14</sup> Long-term ketamine use is also associated with disrupted liver biochemistry<sup>15</sup> and biliary tract anomalies.<sup>16</sup>

Seto WK, Mak SK, et al. J Hepatol 2018 <sup>5</sup>



## 研究方法

- 本研究由香港特別行政區政府保安局禁毒處禁毒基金資助
- 透過非政府機構全港性招募參與者



- 基督教巴拿巴愛心服務團
- 東華三院越峰成長中心
- 香港路德會社會服務處
- 香港明愛
- 基督教香港信義會
- 香港基督教服務處 PS33
- 香港青少年服務

只反映各機構大概工作的社區,各機構也有在標誌外地區招募參與者

6



## 研究方法

- 招募對象:
  - 兩年內有6個月曾每月「索K」至少兩次
- 研究對象需要接受臨床評估、血液樣本檢測以及膽道系統的MRI檢查
- 研究團隊中的兩名放射科專科醫生獨立分析MRI結果

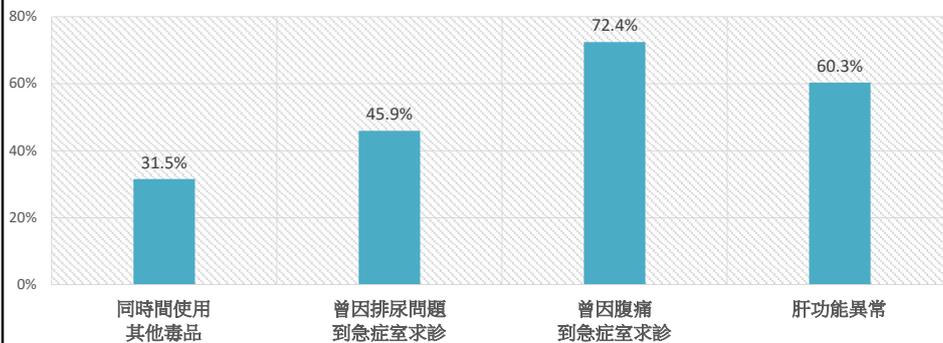


7



## 研究結果

- 納入人數: 257人
- 平均年齡: 28.7歲
- 平均「索K」時間: 10.5年



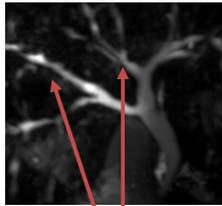


## 研究結果

159人(61.9%)磁力共振檢測到膽道系統問題



總膽管擴張  
137人(53.3%)



肝內膽管擴張  
91人(35.4%)

如果:

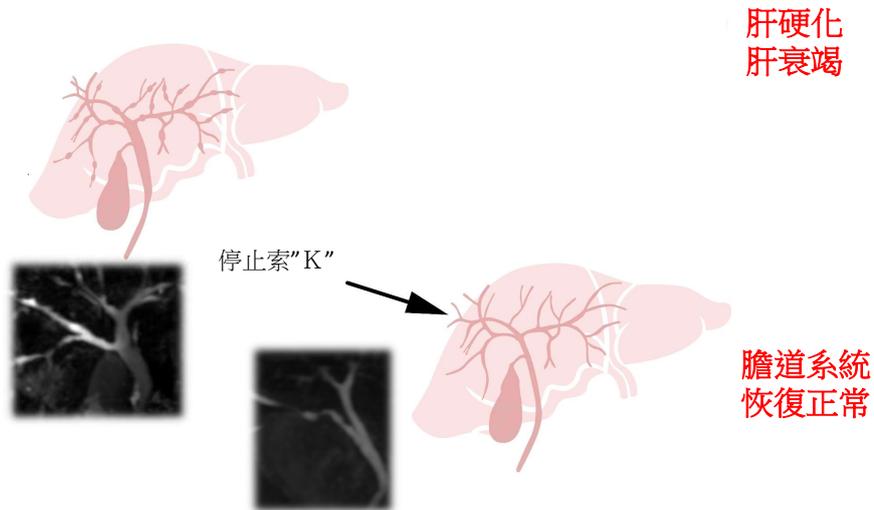
- ALP (肝酵素其中一類) 升高
- 沒使用其他毒品
- 同時間有排尿問題

有膽道問題機會就增加

9



## 研究結果



10



## 總結

- 大多數長期「索K」人士均出現膽道系統損害。
- 高風險「索K」人士應該進行膽道系統初篩檢測。
- 禁毒宣傳教育中應強調：
  - 停止「索K」後膽道系統可以恢復正常
  - 長期「索K」可引起的肝硬化

向毒品說不!



戒毒人士分享



# 問答環節