

Rationale for Addition of Ketamine to the Triplicate Prescription Program Effective November 1, 2010

Background:

Available information suggested that ketamine use for ambulatory patients in Alberta was increasing, both for chronic non-cancer pain and for palliative care. We know that ketamine has abuse and misuse potential and has street value. At this time, the majority of ketamine on the street is believed to be diverted from wholesale sources and veterinary clinics. The Alberta Veterinary Medical Association (ABVMA) requires veterinarians to register with the Triplicate Prescription Program and restricts use of ketamine by its members. Both ABVMA and the College of Physicians and Surgeons of Alberta (CPSA) wanted to explore the potential for monitoring ketamine in the Triplicate Prescription Program.

Bottom Line:

Outside of a hospital setting, for humans, ketamine is an important but infrequently used tool for palliative care and chronic pain physicians. In selected patients with refractory symptoms, ketamine has a recognized role in pain management yet it also has significant risks and illicit street value. After weighing these issues, the TPP Steering Committee and Physician Prescribing Practices Advisory Committee recommended addition of ketamine to the TPP Medication List. ***CPSA Council approved the addition of ketamine to the Triplicate Prescription Program.***

Physicians:

CPSA Council indicated that ketamine used outside hospital settings be limited to physicians with expertise in chronic pain or palliative care. Family physicians can prescribe ketamine in circumstances where the treatment was initiated by another physician with expertise in chronic pain or palliative care management and that other physician is available for ongoing prescribing support.

Clinical Use:

Ketamine is a medication used in human and veterinary medicine for its anaesthetic and analgesic properties. Pharmacologically, it is a *N*-methyl-*D*-aspartate receptor antagonist and it is classified as a Schedule 1 drug under the *Controlled Drugs and Substance Act*. Its predominant use is as a veterinary anaesthetic. In Canada it is available as Ketalar (ERFA Canada) and Ketamine Hydrochloride Injection USP. Ketamine is available in powder, tablet or suspension form.

Indications:

There are limited indications in humans for induction and maintenance of anaesthesia, conscious sedation, refractory neuropathic and cancer-related pain and refractory depression. Ketamine is usually prescribed with other opioids and may have an unpredictable effect.

Risks:

Side effects of ketamine use include: distorted perception, hallucinations, CNS depression, delirium, hypertension, raised intracranial pressure, respiratory impairment, amnesia, impaired motor function, dependence and emergence psychotic reactions. Long term use is associated with cognitive impairment and urinary tract disease.

Abuse Potential:

Ketamine causes a dissociative anaesthesia and is frequently associated with hallucinations and amnesia. It is these properties that make it a drug with abuse potential and street value. Recreational names for ketamine include: K, Ket, Special K and vitamin K. Ketamine is a tasteless, odourless drug that can be added to beverages and has been used by sexual predators to incapacitate their victims.

Illicit Use in Alberta:

RCMP report that the current street value of ketamine is \$50-\$80 per gram. In November, 2009 there was a large seizure of ketamine in powder form, in Edmonton. Ketamine now frequently appears in MDMA (Ecstasy, 3,4-Methylenedioxymethamphetamine) as an adulterant.

Resources

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<http://en.wikipedia.org/wiki/ketamine>. Ketamine. July, 2010.

<http://www.gazette.gc.ca/archives/p2/2005/2005-09-21/html/sor-dors270-eng.html>. Regulations Amending the Food and Drug Regulations (Ketamine). September, 2005.

http://www.aadac.com/124_700.asp. Ketamine. July, 2010.

Personal communication: Dr. Neil Hagen FRCPC, Palliative Care Physician. Alberta Health Services, Acting Director of Provincial Tumour Programs. Calgary, Alberta. May 31, 2010.

Personal communication: Sgt. Lorne Adamitz, K Division, RCMP. Edmonton, Alberta. July 27, 2010.

Personal communication: Sgt. Donna Hanson, Drugs & Organized Crime Awareness Service Calgary Drug Section Southern Alberta District RCMP. Calgary, Alberta. July 27, 2010.