Loyola University Chicago Comparative Medicine Facility

Standard Operating Procedure

SOP Number: 02-18-5455

Service: Research

Operating Section: Surgery

Unit: CMF

Title: Use of Ketamine

Purpose:

To describe acceptable and unacceptable uses for the dissociative agent, Ketamine, in common laboratory animals.

Procedure:

- 1) Ketamine has become very popular for use in many animal species for several reasons. It has minimal respiratory and cardiovascular effects, and is considered antiarrhythmic. It can be administered IM or IV with little irritation, although in some species, such as rabbits, IM injection may lead to significant irritation and auto-mutilation. Anecdotal evidence of necrosis at the site of i.m. injection has been reported in rats. Use of small volumes of injectate (<0.2 ml, im) may reduce this problem.
- 2) Ketamine is a schedule III non-narcotic that is subject to abuse and is therefore regulated by both the DEA and the State of Illinois.
- 3) Ketamine should not be used alone for most procedures. Pharyngeal and laryngeal reflexes remain active and stimulates salivation, which often leads to laryngospasm, bronchospasm, and coughing. Muscle relaxation is poor with this agent, requiring a relaxant for most procedures. There is also considerable evidence that deep pain, such as that associated with abdominal and orthopedic surgery, is not ablated by ketamine alone. Therefore ketamine is commonly used in combination with xylazine and or acepromazine. An ophthalmic lubricant should always be used with ketamine as the patient's eyes remain open.

Comments: None

OFFICE USE ONLY:

APPROVALS

Responsible Official Signature QA Signature			Date Date	
Version #2	Effective Date	Supersedes #1	Original Date 12/17/01	