Only for the use of Medical Professionals  ${\displaystyle Pentyl^{\$}}$ 

# Ketamine Hydrochloride

## Description:

Pentyl<sup>®</sup> is a preparation of Ketamine Hydrochloride, a non-barbiturate anesthetic.lt can be given by the intravenous or the intramuscular route and has good analgesic properties when used in sub-anesthetic dosage.

### Indication and uses:

Pentyl<sup>®</sup> is indicated

- As the sole anesthetic agent for diagnostic and surgical procedures that do not require skeletal muscle relaxation
- For the induction of anesthesia prior to the administration of other general anesthetic agents
- To supplement low-potency agents such as nitrous oxide

### Dosage and administration

### Induction of anesthesia

*Intravenous injection:* Pentyl<sup>®</sup> should be administered slowly over a period of 60 seconds. The initial dose may range from 1 mg/kg to 4.5 mg/kg. The average amount required to produce 5 to 10 minutes of surgical anesthesia is 2 mg/kg.

*Intramuscular injection:* The initial dose may range from 6.5 mg/kg to 13 mg/kg. A dose of 10 mg/kg will usually produce 12 to 25 minutes of surgical anesthesia.

*Intravenous infusion:* A solution containing 1mg/ml with total dose of 0.5-2 mg/kg.

# Maintenance of Anesthesia:

*Intravenous and intramuscular injection:* Increments of one half to the full induction dose may be repeated for maintenance of anesthesia.

*Intravenous infusion:* 10-45 µgm/kg/min, rate adjusted according to response.

#### Use in pregnancy and lactation

The safety of Ketamine in pregnancy has not been established and such use is not recommended. Ketamine is likely to be excreted in breast milk and therefore breastfeeding should be discontinued when Ketamine is in use.

#### Precautions:

Ketamine should be used by or under the direction of medical practitioners experienced in administering general anesthetics and in maintenance of an airway and in the control of respiratory support. Because pharyngeal and laryngeal reflexes are usually active, Ketamine should not be used alone in surgery or diagnostic procedures of the pharynx, larynx or bronchial tree. In patients with significant renal or hepatic impairment, the elimination of Ketamine could potentially be delayed. Dose reductions should be considered in patients with cirrhosis or other types of liver impairment.

#### Side effects:

Treatment emergent adverse reactions are common during recovery for Ketamine anesthesia and often include unpleasant dreams, confusion, hallucination, delirium.

Blood pressure and pulse rate are frequently elevated following administration of Ketamine. However, hypotension and bradycardia have been observed. Laryngospasm and other forms of airway obstruction have occurred during Ketamine anesthesia. In some patients, enhanced skeletal muscle tone may be manifested by tonic and clonic movements, sometimes resembling seizures. Anorexia, nausea and vomiting have also been observed.

# Contraindications:

Ketamine is contraindicated in patients with any condition in which a significant elevation of blood pressure would constitute serious hazard and in those who are hypersensitive to the drug or its components.

### Warnings:

Cardiac function should be continually monitored during the procedure in patients found to have hypertension or cardiac decompression. Postoperative confusional states may occur during the recovery period.

### Overdose:

Respiratory depression may occur with overdosage or too rapid rate of administration of Ketamine. It has a wide margin of safety; several instances of unintentional administration of overdoses of Ketamine (up to 10 times that usually required) have been followed by prolonged but complete recovery.

### Drug interactions:

Prolonged recovery time may occur if barbiturates and/or narcotics are used concurrently with Ketamine. Ketamine is clinically compatible with the commonly used general and local anesthetic agent when an adequate respiratory exchange is maintained.

# Pharmaceutical precautions:

Store in a cool and dry place, protect from light.

# **Presentation:**

Pentyl<sup>®</sup> injection: Each ml contains Ketamine 50 mg as Hydrochloride BP.

# Package quantities:

Pentyl<sup>®</sup> injection: Carton of 10ml Vial.

® Registered Trade Mark

