

Update to ALS Protocols

Page 83 (rapid sequence intubation); under Procedure, D add:

“When etomidate is unavailable, medics may substitute ketamine 1 to 2 mg/kg IV push for induction.”

Under Drug Formulary, after Ipratropium , insert:

KETAMINE

Mechanism of Action:

Ketamine is a dissociative anesthetic agent, structurally similar to phencyclidine (PCP), which interrupts the connection between the thalamo-neocortical tracts and the limbic system. In addition, it stimulates many different receptors, including the opioid and catecholamine receptors. It is unique among sedative agents in that it also provides analgesia in addition to the amnestic and sedative effects. The sympathomimetic effects cause an increase in heart rate, blood pressure, and cardiac output. It is also a bronchodilator, and thus may be beneficial in patients with bronchospasm requiring intubation.

Indications:

Induction agent for rapid sequence intubation (RSI)

Precautions:

1. Increased blood pressure due to catecholamine release. This drug should be avoided in those patients requiring intubation who also have a markedly elevated blood pressure.
2. Reemergence phenomenon. As with any intubated patient, continued sedation must be provided before the induction agent has worn off.
3. Increased ICP has been a theoretical concern, however studies have not shown a significant increase in ICP with the use of ketamine and therefore it is felt to be an appropriate induction agent for patients with possible increased ICP, unless they have markedly elevated blood pressure.

Drug Interactions:

Many drugs may affect the metabolism of ketamine. However, there are no drugs with which the addition of ketamine would be contraindicated.

Administration:

1-2 mg/kg IV Push

Special Notes:

1. Onset of action is about 60 seconds.
2. Duration of action is about 10 to 20 minutes.
3. When elevated ICP is suspected, consider using a lower dose along with midazolam.
4. Avoid in patients with severely elevated blood pressure.