The Use of Ketamine as a Perioperative Treatment of Parkinsonian Dyskinesia: A Case Series

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Purpose

Reporting on the use of ketamine as an adjunct to anesthesia and perioperative care for patients with Parkinsonian dyskinesia and dysarthria.
Ketamine: Properties

• NMDA receptor antagonist
• Sedative, Analgesic and Amnestic properties
• May be uniquely suited for perioperative treatment of parkinsonian motor dysfunction
Case One

- 57 yo female to undergo bilateral internal pulse generator implantation for treatment of motor dysfunction of PD and levodopa therapy
- Difficult airway indicated awake fiberoptic intubation
- Premedication: midazolam 5mg IV & glycopyrrolate 0.2 mg IV
- Awake intubation facilitated by ketamine
Case One

- Dyskinesias and dysarthria terminated within 30 seconds of administration of 20 mg IV ketamine
- Patient remained responsive and capable of following commands
- Awake fiberoptic intubation completed and general anesthesia induced after total of 80 mg of Ketamine
Case Two

- 54 yo female to undergo pulse generator battery replacement for treatment of motor dysfunction secondary to PD and long term therapy
Conclusions

• Low dose ketamine, as an adjunct to pre-operative sedation, may prove useful for controlling parkinsonian dystonia and dysarthria, reducing anxiety, and increasing patient comfort.

• Low dose ketamine may be used as a temporizing measure for PD symptoms when doses of traditional DA based medications are missed during the perioperative period.
References

Please see provided list