Procedural sedation and analgesia for gastrointestinal endoscopy in children at a tertiary care hospital

Authors: Amyna.Bhimani¹, Humaira.Jurair², Kamran.Sadiq³, Anwar.Haque⁴

Affiliation: Aga Khan University Hospital, Karachi, Pakistan

Objective:
Gastrointestinal (GI) endoscopy is a common procedure for investigation of various GI disorders. In children many of these procedures can be performed under procedural sedation and analgesia (PSA). We describe our experience with PSA in patients undergoing GI endoscopy.

Study:
Study was conducted at Endoscopy suite of Aga Khan university Hospital from August 2014 to December 2015. Children between ages 2-16 years were included. Combination of low dose of ketamine (1 mg/kg) and propofol (1-2 mg/kg) were used. All procedures were conducted according to ASA guidelines by two trained health care providers. We report indications, type of endoscopy, efficacy and complication rate of PSA.

Result:
A total of 55 patient required PSA for their endoscopy procedure. Mean age was 10.5 years and mean weight was 32.8 in kg. 65 % were male. We administered PSA only in Diagnostic endoscopic procedure. Most procedures (98%) were upper GI endoscopy and there was only one case of lower GI endoscopy.

Minor adverse events were noted in (n= 5) 9.0% patients. These included 2 episodes of transient de-saturation <90% for 1 min (3.6%), 2 episode of apnea (3.6%) and 1 episode of hallucination (1.8%). 90.9% of procedures was successfully performed under PSA. Only one of procedure was withheld after few minutes because of excessive cough produced during procedure. All complications resolved after simple maneuvers.

Conclusion: PSA were found safe and efficacious in selected GI endoscopy cases.

Key words: Procedural sedation and analgesia, Gasterointestinal endoscopy, children