

IAPA Sedation/Analgesia Advisory For Indian Children

(Statements do not supersede instructions of concerned anesthesiologist/ Sedation Team)

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With technological innovations complexity of procedures and demand for sedation services to facilitate diagnosis and perform interventions in high risk patients has increased. This is the matter of concern – children have narrow margin of safety and complications do occur.

THIS ADVISORY IS AN EFFORT TO ENSURE SAFETY OF CHILDREN DURING AND AFTER PROCEDURES PERFORMED UNDER SEDATION AND ANALGESIA IN NON-OPERATING ROOM LOCATIONS.

I. Appropriate infrastructure and manpower	III Preparation, Monitoring, peri-procedural Care	IV. Patient care after the procedure	V. Back up plan after Discharge																																																															
<ul style="list-style-type: none"> Identify areas where patients will be Evaluated, Monitored, Sedated and Recover after the procedure. The set up should have facilities to tackle the worst possible scenario Dedicated TEAM familiar with the location and Resources available (Trained in basic and Advanced Pediatric Resuscitation, Airway management and adequate experience in handling adverse events in these resource limited areas. 	<ul style="list-style-type: none"> Establishing rapport, Confirm fasting status. Quick reassessment (Missed findings, Loose tooth, Cardiac valve etc) Identification of problem areas / risk (Mild, Moderate, Severe) <p>IAPA Monitoring Guidelines 2016 www.iapaindia.com/guide-lines.html.</p>	<ul style="list-style-type: none"> Monitor in a well-equipped recovery area, Suction apparatus An oxygen source to provide more than 90% oxygen Bag-valve-mask device for positive pressure ventilation Monitoring should be continued till the discharge criteria are met Age appropriate pain and recovery scores are used 	<ul style="list-style-type: none"> Clear documentation should be maintained with regard to the patients status, vitals at the time of discharge and the parent or caregivers signature taken at the time of discharge. Appropriate instructions should be given to a reliable adult, regarding diet, medication and assessment of activity level in the next 24 hours. 																																																															
<h3>II. Patient Evaluation and Written Informed Consent</h3>	<ul style="list-style-type: none"> Heart rate monitoring Intermittent measurement of blood pressure Respiration using capnography Continuous oxygenation monitoring using SpO2 with audible alarm. (O2 supplementation FiO2 0.24-0.40, if SpO2 is<94%: FiO2 0.6-1) <p>Area compatible Equipment/Monitors to avoid mishaps eg. In MRI, interventional radiology suites</p>	<h3>Ramsay sedation scale</h3>	<ul style="list-style-type: none"> Attendants should be provided with a list of warning signs and actions to be taken. (Let the care taker repeat the instructions given to ensure they have understood (closed loop communication) 																																																															
<ul style="list-style-type: none"> Challenge- variable Age groups Neonates to Teenagers. Pre-designed structured Performas ensure detailed evaluation. Review medical/ anesthetic records to learn about previous adverse events Spend adequate time with the care- takers to allay their fears and apprehensions. Use play therapy/distraction methods to get maximum information. Discuss how child expresses pain, hunger, thirst etc. confirm fasting status. Ask about Medical facilities available in patients surrounding area and mode of transportation. Obtain appropriate Written Informed Consent. 	<p>Premedication</p> <ul style="list-style-type: none"> Some patients may require glycolytic agents, local anaesthetics and antibiotic prophylaxis. Aspiration prophylaxis (Ranitidine 2mg/kg & Metoclopramide 0.2mg/kg) for patients with high risk for aspiration Anti-epileptics to be continued in children who are already taking, <p>Sedative agents</p> <ul style="list-style-type: none"> Propofol/Midazolam/Ketamine (either alone or in combination) Dexmedetomidine IV/ intranasal or Oral Clonidine . 	<table border="1"> <tr> <td>Patient anxious, agitated or restless</td> <td>1</td> </tr> <tr> <td>Patient co-operative, oriented and tranquil</td> <td>2</td> </tr> <tr> <td>Patient asleep, responds to commands only</td> <td>3</td> </tr> <tr> <td>Patient asleep, responds to gentle shaking, light glabellar tap or loud auditory stimulus</td> <td>4</td> </tr> <tr> <td>Patient asleep, responds to noxious stimuli such as firm nail bed pressure</td> <td>5</td> </tr> <tr> <td>Patient asleep, has no response to firm nail-bed pressure, other noxious stimuli</td> <td>6</td> </tr> </table>	Patient anxious, agitated or restless	1	Patient co-operative, oriented and tranquil	2	Patient asleep, responds to commands only	3	Patient asleep, responds to gentle shaking, light glabellar tap or loud auditory stimulus	4	Patient asleep, responds to noxious stimuli such as firm nail bed pressure	5	Patient asleep, has no response to firm nail-bed pressure, other noxious stimuli	6	<ul style="list-style-type: none"> Children who required repeat doses of medications or reversal agents (e.g., naloxone, flumazenil) should preferably be admitted and monitored overnight in the hospital Designate an ICE area for day care patients where 24 hours care is available A satisfaction score of services provided can also be taken 																																																			
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