Pacienți cu nevoi speciale
Urgențe în sedare și analgezie

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Special considerations

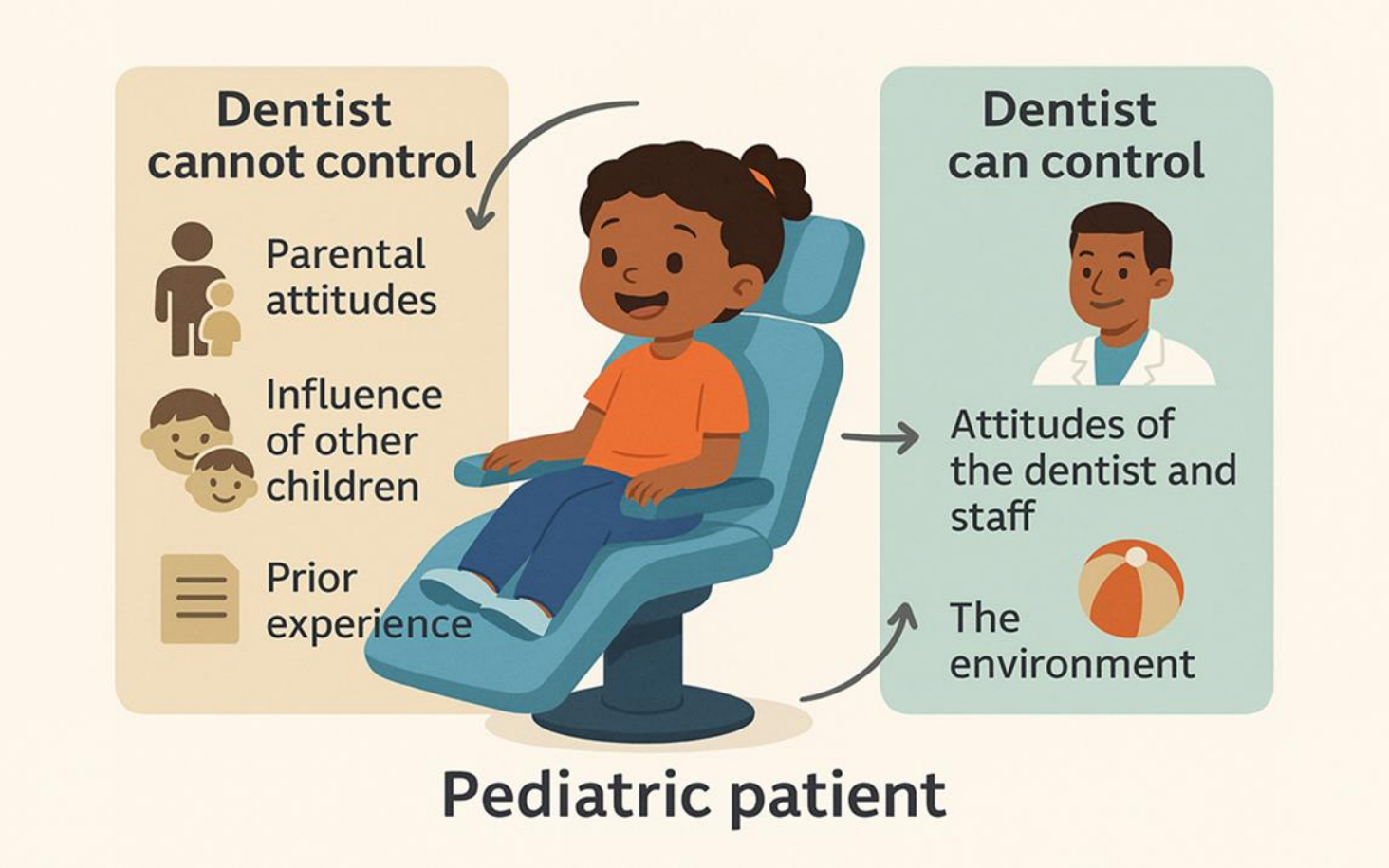
Pediatric patients

Geriatric patients

Neurologic Illnesses and other conditions

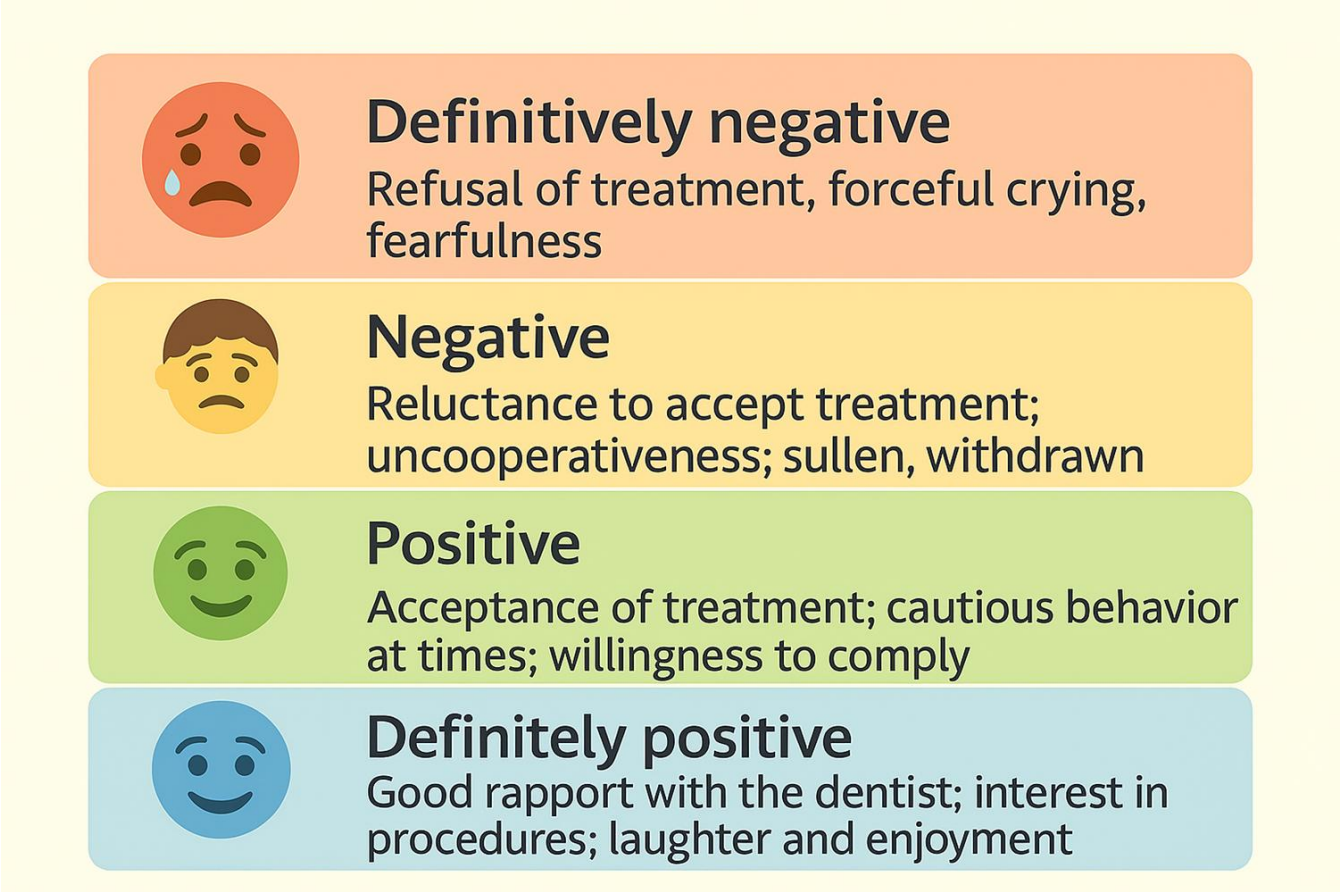
The pediatric patient

Factors Influencing Patient Response



Behavioral Evaluation of the Pediatric Patient

- **Frankl Behavior Rating Scale**: dentist places the child's behavior into one of four categories



System devised by Wright

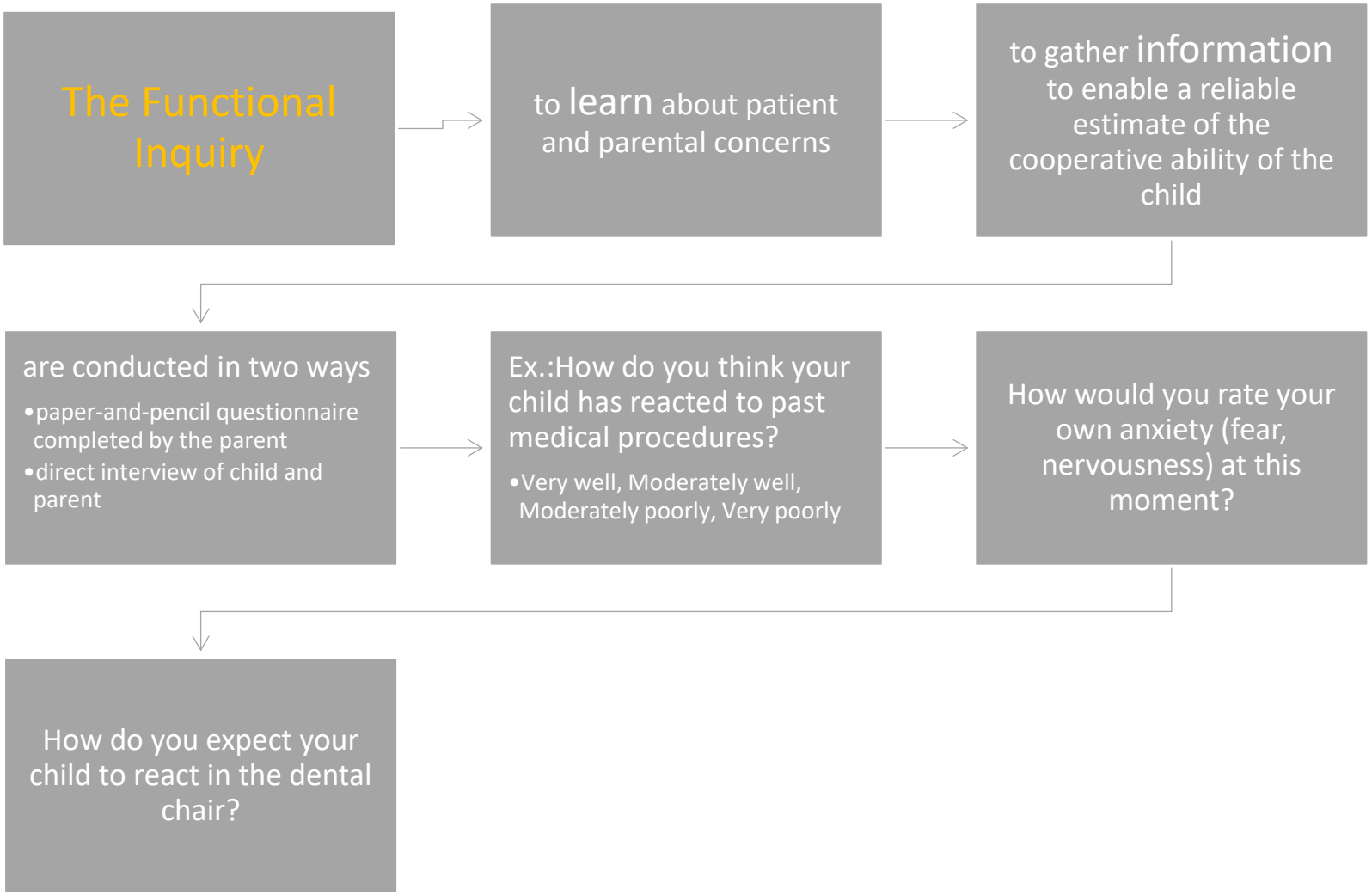
1. Cooperative

2. Lacking cooperative ability

- A) Very young children with whom communication cannot be established or comprehension expected
- B) Children with specific debilitating or handicapping conditions

3. Potentially uncooperative behavior

- A) Uncontrolled behavior:
- B) Defiant behavior: may use passive resistance
- C) Timid behavior
- D) Tense cooperative behavior
- E) Whining behavior



Determining the need for sedation in pediatric patients

1. Assessment of dental need
   - Minimal treatment vs full mouth treatment
2. Patient cooperation
   - at least one and preferably two attempts at treatment should be made before considering the use of sedation or general anesthesia
   - screaming as they walk in vs sits and cries throughout the treatment
3. Parental cooperation and involvement
4. Economic considerations
5. Alternative treatment plans
6. Preoperative health evaluation
7. Preoperative behavioral assessment
8. Training and experience of dentist and staff

Techniques

1. Inhalation sedation (N2O-O2)
2. Oral sedation and inhalation sedation
3. Oral sedation

NOT recommended for use by a dentist not trained in the management of the unconscious patient and proficient in airway management:

- IV sedation with or without inhalation sedation
- IM/IN and IV sedation with or without inhalation sedation
- Use of the above with body and oral restraints

OMS 1921/10.12.2025 – OMS 1500/2009

Factors affecting pediatric drug dosage

Age of the child

Weight of the child

Mental attitude of the child

Level of sedation desired

Physical activity of the child

Contents of the stomach

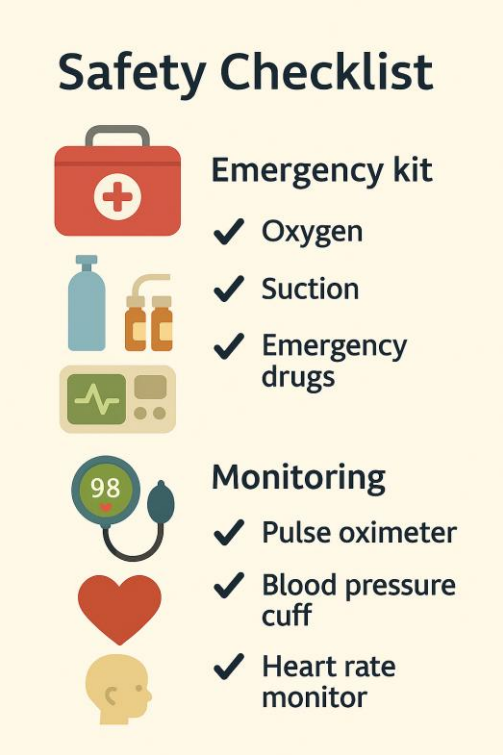
Time of day

Ability to titrate

Recommended Monitoring for Pediatric Patients[10]

	MODERATE SEDATION	DEEP SEDATION
Personnel	An observer who will monitor the patient but who may also assist with interruptible tasks; should be trained in PALS	An independent observer whose only responsibility is to continuously monitor the patient; trained in PALS
Responsible practitioner	Skilled to rescue a child with apnea, laryngospasm, and/or airway obstruction, including the ability to open the airway, suction secretions, provided CPAP, and perform succesfull bag–valve–mask ventilation; recommended that at least one practitioner should be skilled in obtaining vascular access in children; trained in PALS	Skilled to rescue a child with apnea, laryngospasm, and/or airway obstruction, including the ability to open the airway, suction secretions, provided CPAP, and perform succesfull bag–valve–mask ventilation, tracheal intubation, and cardiopulmonary resuscitation; training in PALS is required, at least one practitioner skilled in obtaining vascular access in children immediately available
Monitoring	Pulse oximetry ECG recommended Heart rate Blood pressure Respiration Capnography recommended	Pulse oximetry ECG recommended Heart rate Blood pressure Respiration Capnography recommended
Other equipment	Suction equipment, adequate oxygen source/supply	Suction equipment, adequate oxygen source/supply, defibrillator required
Documentation	Name, route, site, time of administration, and dosage of all drugs administered Continuous oxygen saturation, heart rate, and ventilation (capnography recommended); parameters recorded every 10 minutes	Name, route, site, time of administration, and dosage of all drugs administered Continuous oxygen saturation, heart rate, and ventilation (capnography required); parameters recorded at least every 5 minutes

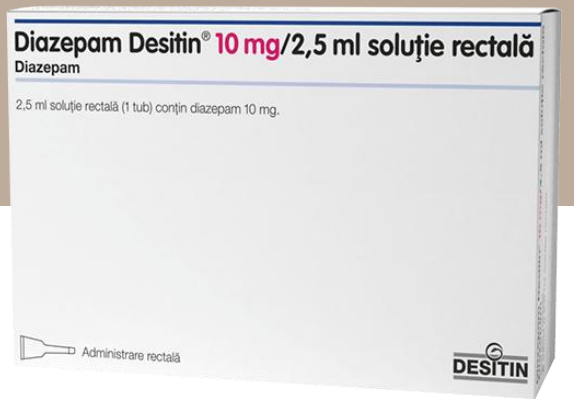
Dedicated recovery area with rescue cart properly stocked with rescue drugs and age- and size-appropriate equipment and dedicated recovery personnel; adequate oxygen supply	Recommended; initial recording of vital signs may be needed at least every 10 minutes until the child begins to awaken, then recording intervals may be increased	Recommended; initial recording of vital signs may be needed for at least 5-minute intervals until the child begins to awaken, then recording intervals may be increased to 10–15 minutes.



DRUGS

Diazepam oral + N2O-O2	Midazolam (oral) + N2O-O2	Hydroxyzine + N2O-O2
Diazepam alone	Hydroxyzine (Atarax or Vistaril) alone	Midazolam (intranasal) + N2O-O2

What about intrarectal route?



- Desitin = Diazepam 5/10 mg rectal tubes - Not mentioned in OMS 1921/2025

Feature	Rectal (Intrarectal) Route	Oral Route
Administration	Via rectum (suppository, rectal solution)	Swallowed (tablet, capsule, liquid)
Onset of action	Moderate to fast (drug-dependent)	Slow to moderate
First-pass metabolism	Partially avoided	Present (hepatic first-pass effect)
Absorption	Variable	More predictable
Patient comfort	Lower	Higher
Use in vomiting/unconscious patients	Suitable	Not suitable
Dose control	Less predictable	More precise
Long-term use	Not recommended	Suitable
Typical use	Emergencies, pediatrics, when oral route is not possible	Routine and chronic treatment

Hydroxyzine	Midazolam	Diazepam
Dose is 0.6 mg/kg PO	Dose 0.25 - 0.75 mg/kg PO	Dose 0.2 to 0.4 mg/kg PO

Hydroxyzine

Pros

- ✓ Provides sedation and anti-anxiety effects
- ✓ Also has antiemetic and antihistamine properties

Cons

- ⚠ Slower onset (15–60 minutes)
- ⚠ Can cause drowsiness and dry mouth

Midazolam

Pros

- ✓ Rapid onset (10–30 minutes)
- ✓ Strong anxiolytic and amnesic effects
- ✓ Flexible routes (oral, intranasal)

Cons

- ⚠ Shorter duration; may require repeat dosing

Diazepam

Pros

- ✓ Effective anxiolytic and muscle relaxant
- ✓ Long history of safe use in pediatric sedation
- ✓ Oral solution and tablet options

Cons

- ⚠ Slow onset (45-60 minutes)
- ⚠ Long half-life → prolonged recovery

Inhalation Sedation

- Nasal hood

Discharge Criteria

- Cardiovascular function and airway patency are satisfactory and stable
- Patient is easily arousable and protective reflexes are intact
- Patient can talk (if age appropriate)
- Patient can sit up unaided (if age appropriate)
- For very young or handicapped child: return to presedation level of responsiveness
- State of hydration is adequate
- Must be accompanied by a parent, legal guardian, or responsible parson
- If parent or guardian insists on early discharge: note in chart and countersign by a second person

The geriatric patient

The Geriatric Patient

Young-old
Ages 65 to 74

Old
75 to 84

Oldest-old
85 and older

Chronological

Biological

Everyone ages in two ways: chronologically and biologically

Challenges in Geriatric Dental Care

Key Challenges

Polypharmacy (drug interactions)

Reduced physiological reserve

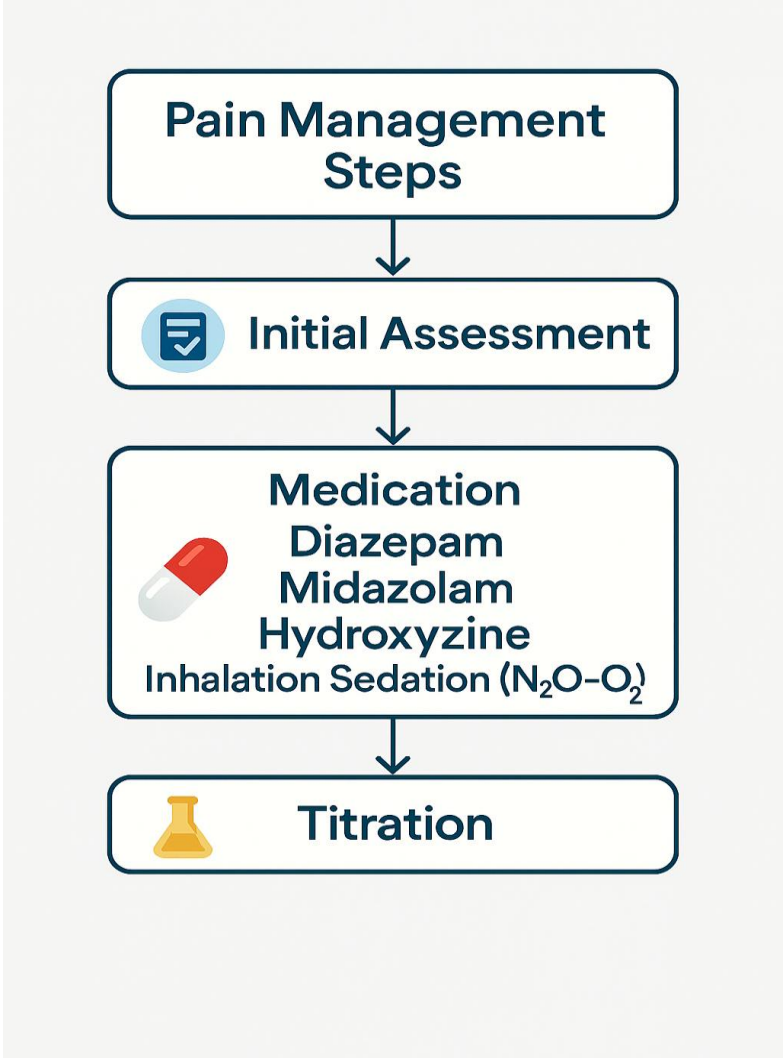
Cognitive decline

Mobility limitations

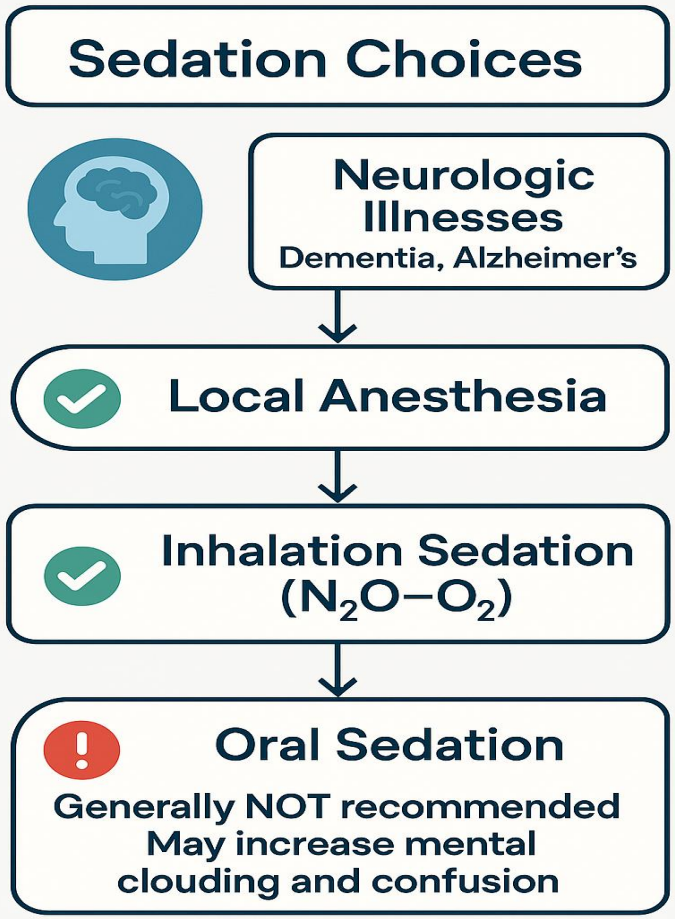
Risk Factors

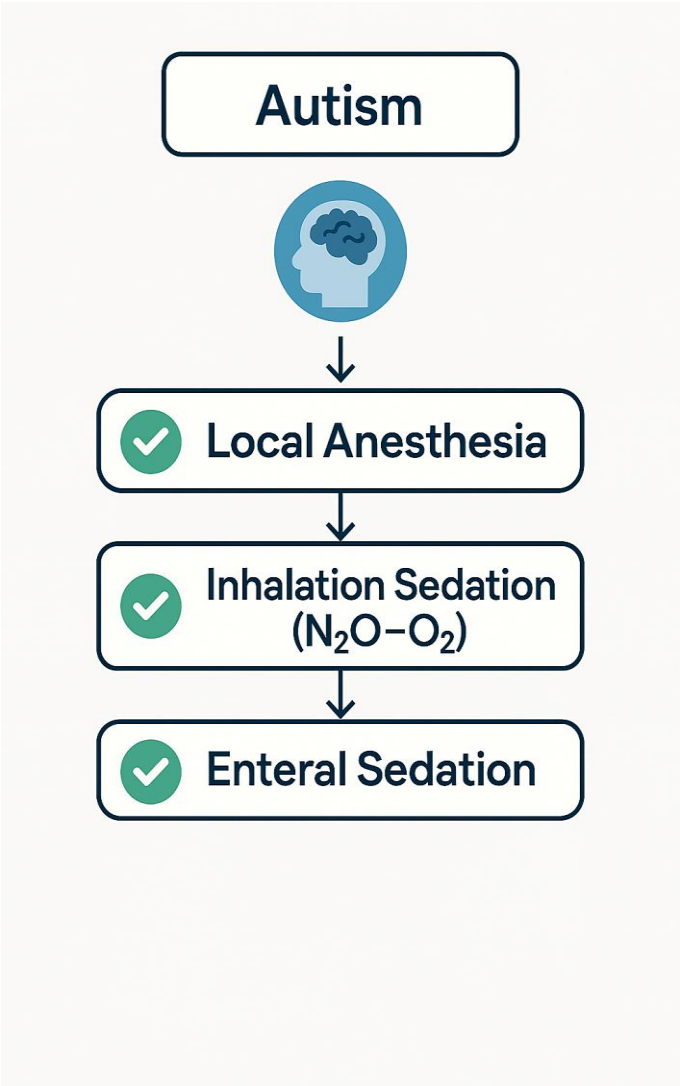
- Cardiovascular isease
- Diabetes

- Osteoporosis
- Frailty



Neurologic illnesses and other conditions





Intellectual and Developemenatal Disabilities

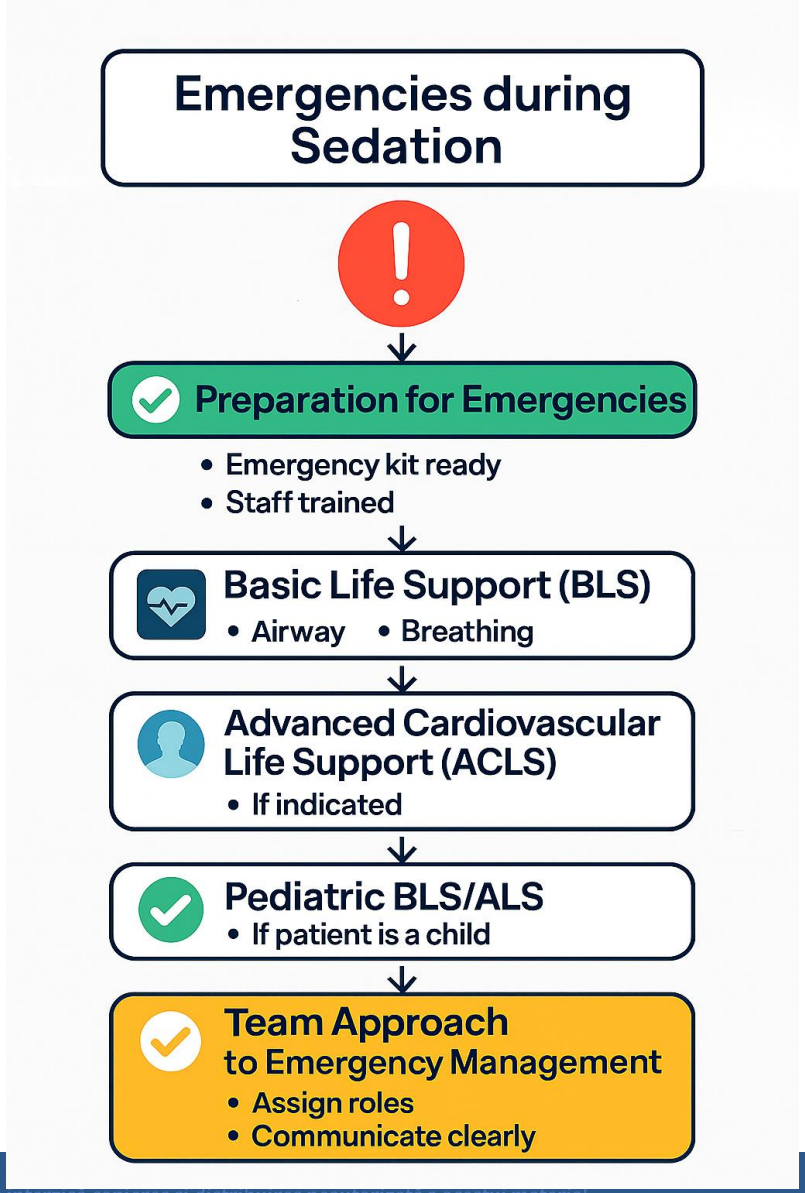
Local Anesthesia

- Preferred for most procedures
- Use short-acting anesthetics
- Avoid long-acting agents (risk of lip/cheek biting)
- Monitor for self-injury post-procedure

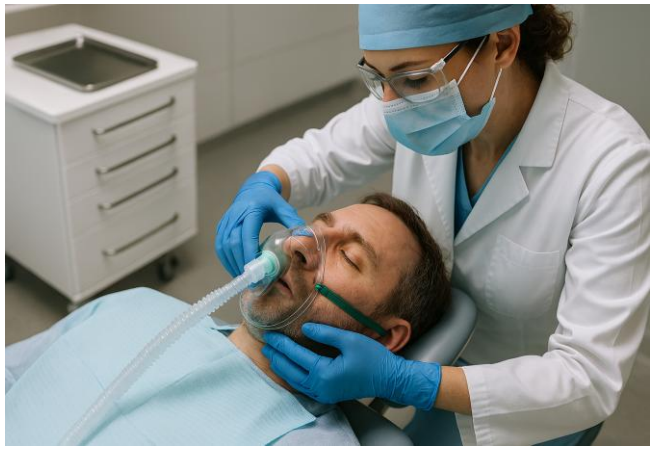
Inhalation Sedation (N_2O–O_2)

Oral Sedation

Emergencies in dental practice



Overdose	Allergy	Hypotension
Hypertension	Cardiac dysrhythmias	Airway obstruction
Emesis and aspiration	Hyperventilaton	Seizures
Hypoglycemia	Syncope	



Steps

- Recognise the emergency
- Terminate the treatment
- **P**: position the patient
  - Supine with feet elevated (hypotension)
  - Upright or semierect position (difficult breathing)
- **ABC**: airway, breathing, circulation
- **D** : definitive treatment
- Activate EMS

Take home message

- The best treatment for these emergencies is their prevention
  - Adequate preoperative patient evaluation
  - Adherence to recommended technique
  - Intraoperative monitoring
  - Postoperative management
  - LAW