

- He/she is deemed medically stable
- His/her consciousness has returned to baseline
- He/she can sit unassisted
- There is no vomiting
- You are confident of his/her care upon discharge

Our doctors will assess your child before discharging him or her from our Children's Emergency.



You may start to feed your child some clear fluids such as juice or water in small amounts, 1 to 2 hours after he/she is discharged. If he/she tolerates this well without vomiting, you may gently and slowly escalate to solids.

Your child may have short-term memory loss, sleepiness and unsteadiness for up to 24h post-sedation. Parental assistance and supervision is important even after your child is allowed to go home. In the next 24 hours:

- You should not leave your child unaccompanied
- Allow your child adequate rest
- Your child should not engage in sports or vigorous activities
- Walk your child to the bathroom



You should seek further medical attention if your child:

- Vomits repeatedly post-sedation
- Becomes very agitated or upset
- Develops any difficulty with breathing
- Is difficult to wake up

The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical condition.

About the Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI)

The KTP-NUCMI is the paediatric arm of the National University Hospital and comprises the Departments of Paediatrics, Paediatric Surgery and Neonatology. We provide comprehensive and specialised medical and surgical services for newborns, children and adolescents. NUH is the only hospital in Singapore that offers paediatric kidney and liver transplant programmes. Through a generous gift from the Estate of Khoo Teck Puat, we have set up an integrated outpatient facility with medical, diagnostic and rehabilitation services.

For more information about us, visit www.nuh.com.sg/ktp-nucmi.

Contact Us

24-hour Children's Emergency

Location: NUH Main Building, Zone F, Level 1
General Enquiry: +65 6772 5000

KTP-NUCMI

Location: NUH Main Building, Zone E, Level 2
(Accessible via Kent Ridge Wing, Zone C, Level 2, Lift Lobby C)
Operating Hours: 8.30am – 5.30pm (Mon to Fri), 8.30am – 12.30pm (Sat)
General Enquiry: +65 6772 5736 Appointment Line: +65 6908 2222
Email: ktpnucmi_appt@nuhs.edu.sg

9a Viva-University Children's Cancer Centre

Location: NUH Medical Centre, Zone B, Level 9
Operating Hours: 8am – 5.30pm (Mon to Fri)
Appointment Line: +65 6772 5030 Fax: +65 6872 4314
Email: cbccappt@nuhs.edu.sg

NUH Children's Urgent Care Clinic @ Bukit Panjang

Location: Junction 10, 1 Woodlands Road, #01-22, Singapore 677899
Operating Hours: 9am – 11pm daily (including public holidays)
General Enquiry: +65 6219 1538 Email: childreucc@nuhs.edu.sg
Website: www.nuh.com.sg/ucc

NUH Child Development Unit @ JMC

Location: Jurong Medical Centre,
60 Jurong West Central 3, Level 2, Singapore 648346
Operating Hours: 8.30am – 5.30pm (Mon to Fri)
Appointment Line: +65 6665 2530/2531 Fax: +65 6665 0158
Email: cdu@nuhs.edu.sg Website: www.nuh.com.sg/cdu

NUH Child Development Unit @ Keat Hong

Location: Keat Hong Community Club,
2 Choa Chu Kang Loop, #03-01, Singapore 689687
Operating Hours: 8.30am – 5.30pm (Mon to Fri)
Appointment Line: +65 6769 4537/4637 Fax: +65 6665 0158
Email: cdu@nuhs.edu.sg Website: www.nuh.com.sg/cdu

National University Hospital

Location: 5 Lower Kent Ridge Road, Singapore 119074
Tel: +65 6908 2222 Email: contactus@nuhs.edu.sg
Website: www.nuh.com.sg



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NUH Campus Map

Information is correct at the time of printing (November 2022) and subject to revision without prior notice.

Procedural Sedation and Pain Relief



What is Procedural Sedation and Analgesia (PSA)?

PSA involves giving your child medication to reduce pain, anxiety and distress during a procedure where he/she is required to stay still. This is to ensure that he/she can receive the treatment they need as quickly and safely as possible. Sedation differs from general anaesthesia in that your child is awake enough to control his/her breathing.

Sedative medication can either be given orally, inhaled through the nose, through an intravenous line (often through a vein in the arm) or via an injection. The route and type of medication given depends on what your child needs.

Why does my child require sedation?

PSA helps the medical team to complete the necessary procedure safely and reduces distress to your child.

It is typically used for short procedures such as:

- Stitching of a cut
- Minor dental procedures
- Removal of a foreign body
- Manipulation and reduction of a broken bone or dislocated joint
- Debridement and dressing of burns
- Imaging studies such as a computed tomography (CT) scan



What are the alternatives to sedation?

- **No sedation:** This is suitable for older children who are able to cooperate and lie still throughout the procedure. Distraction techniques can be used. Local anaesthesia may be applied, inhaled or injected to numb the relevant area if the procedure is painful.
- **General anaesthesia (GA):** This is more appropriate for longer procedures that require your child to be completely still. While under GA, your child will have no awareness and will need to have his breathing supported. GA can only be administered in the operating theatre by an anaesthetist. Should your child require GA, he would need to be admitted to the hospital.

What are the risks of sedation?

Procedural sedation is generally a very safe practice. Before sedation is administered, the medical team will enquire about your child's health and perform an assessment to determine if it is safe to proceed.

The risks to your child depend on the type of sedation used and the presence of any pre-existing medical conditions.

Some possible side effects include:

- Involuntary movements
- Recovery agitation
- Decreased rate of breathing
- Nausea and vomiting
- Headaches
- Dizziness
- Changes in heart rate and blood pressure (rare)

Throughout the procedure, your child will be monitored closely and oxygen may be administered if necessary. After the procedure, your child may not remember the experience and this is normal. Side effects are usually minor and tend to go away shortly after.

There is a chance that your child may not be adequately sedated despite optimal doses of medication. In such a situation, the procedure may not be completed successfully. Your doctor will then discuss alternative plans for your child with you.

Preparing my child for sedation

- Ensure that your child fasts for an hour prior to the procedure. He/she will still be able to drink clear fluids or breast milk during this time. Patients at higher aspiration risk may be advised to fast for a longer time.
- Be calm as your child will pick up on your own anxiety and fears.
- Answer the questions they have about the procedure honestly and realistically. Avoid bargaining, criticising or apologising to your child, e.g. instead of allowing your child to decide on when the procedure should start, let your child make decisions about what video to watch while waiting for the procedure to begin, or what they would like to eat after they are discharged.



Your doctor and/or nurse will explain everything you need to know before asking for your consent. Please share any concerns that you may have with them. Before the procedure, you will be allowed to stay with your child until he/she falls asleep, and will be allowed back with him/her after the procedure is completed, so that your child sees you when he/she wakes up.

Caring for my child post-sedation

After the procedure, your child will likely remain drowsy for a period of time. The time to recovery from sedation is variable and may take up to 1 hour. Your child will need to stay in the Children's Emergency for monitoring until: