

## PATIENT INFORMATION

# Children's MRI Scans under sedation with intranasal Dexmedetomidine – Information for parents

## Why might my child need sedation or General Anaesthetic (GA)?

MRI scans take around 30-60 minutes per body part scanned. GA or sedation helps children remain still and comfortable during the scan to allow for clear and precise images to be obtained. Some children may not be suitable for sedation and GA may be required depending on their medical history.

If your child is eligible for their MRI under sedation, please note the following important information.

## What is Sedation with Intranasal Dexmedetomidine?

Dexmedetomidine is a sedative medication that can be given **through the nose** as a spray. It is odourless and painless upon delivery and induces sedation or a 'sleep-like state' without the deeper levels of unconsciousness seen in General Anaesthetic.

## How Does It Compare to General Anaesthesia?

- **Less invasive** – Usually no needles or intravenous (IV) lines required, unless your child needs contrast for the scan which needs to be injected in a vein.
- **Lower risk of respiratory complications** – Unlike General Anaesthesia, Dexmedetomidine does not cause any changes in breathing and does not

require the use of tubes or plastic airways to maintain breathing respiratory depression and will not require intubation and ventilation.

### Is it safe?

Intranasal Dexmedetomidine is generally safe, but mild side effects may include:

- **Temporary drowsiness**
- **Irritability**
- **Mildly reduced heart rate and blood pressure** (usually not significant)

Serious complications are rare. Your child will be monitored closely throughout the procedure by a trained sedation team.

### Preparing for MRI under Sedation

To improve the effectiveness of sedation:

- **The night before** – Allow your child to stay up **one hour later** than usual.
- **On the day of the scan** – Wake your child at least **one hour earlier** than usual and try to keep them awake on the journey.
- **Fasting** – Your child must not eat for 6 hours before arriving in the hospital (4 hours for breastmilk). They can drink sips of water a few hours before the scan.

### What happens on the day?

- Please arrive at the SSPAU level 7 (the floor above Louisa Carey) assessment unit of Louisa Cary ward at 07.30 so necessary checks can be completed prior to the scan.
- On arrival your child will have their vital observations done and you will be seen by the anaesthetic team who will discuss the plan, and gain verbal consent for sedation and scanning.
- When ready, the medication is then given as a nasal spray by either an anaesthetist or an experienced nurse.
- Play staff will be on hand to support if your child if needed.
- After 20-30 minutes you will accompany your child with a trained nurse down to the MRI department
- Once in the MRI department, consent and the safety checklist will be checked and your child will be moved onto the scanner trolley which is situated outside of the scanner
- If your child is not sleepy enough, then we can give a further dose of Dexmedetomidine intranasally and then wait for 15 minutes or opt for a general anaesthetic
- If any concerns arise or your child does not experience enough sedation during the scan the team may need to swap to General anaesthetic to ensure a diagnostic scan is completed.
- The scan time is usually around 30-45 minutes
- Throughout the procedure, your child will be carefully monitored by the medical team.

## **Recovery and Discharge**

- Your child may feel drowsy or unsteady after the scan. If needed, bring a pushchair or buggy for the journey home.
- Once fully awake and able to eat and drink, you will be allowed to take them home.
- The radiologist will send the scan results to your child's doctor for review before their next outpatient appointment.

### **How to contact us:**

Assessment Unit, Louisa Cary Ward: (01803) 655492 or (01803) 6555226

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For further assistance or to receive this information in a different format, please contact the department which created this leaflet.