

Sucrose for Neonatal Pain Management

Do infants feel pain?

Babies do feel pain. If a baby is premature, the pain response may affect other immature body systems such as heart rate, alertness (neurological status), kidney function and other systems.

What is sucrose?

Sucrose or sugar (25%) is a clear liquid that contains 250mg sucrose per ml. It can reduce the pain response by exciting taste buds (on the tongue) which possibly increases the baby's natural pain reduction response. It is the sweet taste sensation rather than the sugar that has the pain reducing effect.

When can sucrose be used?

Sucrose can be given by the nurse 2 minutes before any minor invasive procedure e.g. heel-pricks, intravenous access, arterial access, injections, lumbar punctures, eye exams, but is not limited to only these procedures. The dose of sucrose may be divided and given in stages through-out these procedures at the discretion of the nurse.

There are some conditions and times when sucrose should not be used, if you are concerned, please discuss this with the medical and nursing staff looking after your baby.

How is sucrose given?

Sucrose is given at front of tongue or mouth. It is NOT to be given via feeding tubes, because it acts on the baby's taste buds.

How much sucrose can be given?

For babies less than 1500g in weight: up to 0.5mls of 25% sucrose with a maximum of five doses in 24 hours.

For babies greater or equal to 1500g in weight: Up to 1ml of 25% sucrose with a maximum of five doses in 24 hours. The effect of sucrose may decrease as the baby gets older.

How is sucrose stored?

Bottles of 25% sucrose are for single baby use only and are kept at each baby's bedside. Once a bottle has been opened it can be used for a week before being replaced. Once a dosage is drawn up it should be used for that single procedure.

What else can be used for neonatal pain/ procedures?

Other non-medicine actions to reduce pain for procedures are:

- Non-nutritive sucking
- Less light, noise and cold around baby
- Swaddling or nesting, creating boundaries
- Holding/touching and rocking baby
- Expressed breast milk on the tongue

Parents are encouraged to discuss the pain relief that their baby requires with the medical and nursing staff looking after their baby.

Other pain relief maybe prescribed for major procedures.