Protocol for the use of sucrose solution for procedural pain management

Sucrose
- Reduces distress associated with painful procedures in babies < 3 months of age
- Is safe, and easily administered.
- Must be prescribed on the drug chart (as required) or administered under patient group directive
- Will only be effective if administered orally
- Should be used in conjunction with other non-pharmacological comfort measures (non-nutritive sucking, positioning, etc) and appropriate analgesia.

Preparation
- 24% sucrose solution (sucrose & water) (Sweet-Ease)

Indications
Sucrose should be prior to invasive procedures such as:

<table>
<thead>
<tr>
<th>Heel puncture</th>
<th>Venepuncture + Cannulation</th>
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<tbody>
<tr>
<td>Urinary catheterisation</td>
<td>Eye examination</td>
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<tr>
<td>Naso-gastric tube insertion</td>
<td>IM/SC injections</td>
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<tr>
<td>Lumbar puncture</td>
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</table>

It can also be used for procedures likely to cause distress such as:

<table>
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<tr>
<th>Colostomy bag change</th>
<th>Removing tape</th>
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<tbody>
<tr>
<td>Scalp electrode placement</td>
<td>Dressing change</td>
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<tr>
<td>Suturing</td>
<td>Painful physiotherapy</td>
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</tbody>
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Contra-indications
- Fructose or sucrose intolerance
- Direct administration onto tongue or buccal surface is unavailable (not effective via any other route)
- Paralysed and sedated

Cautions
- Suspected or confirmed necrotizing enterocolitis (NEC)
- Intubated patients

Administration
- Administer 0.1ml of sucrose solution onto anterior aspect of tongue or inside cheek, or dip dummy into solution to coat
- 1 to 2 minutes prior to procedure
- Offer a dummy if part of babies normal care (the dummy promotes non-nutritive sucking which will enhance the effect of the sucrose)
- Repeat the dose upon commencement of the procedure and every 2 minutes if required
- Maximum dose per administration: 27-31 weeks: 0.5ml; 32-36 weeks: 1ml; 37 weeks/È3 month: 2ml (no daily maximum has been identified)
- The peak action is 2 minutes
- The duration of action is 5-10 minutes
- Discard remaining solution after use (single use only)
- Observe for gagging, choking, coughing and vomiting

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Assessment and Documentation

- An appropriate Pain Assessment tool should be used to assess the infant before, during and after the procedure: these scores must be recorded in patient record
- All doses administered must be recorded on the patients prescription chart

References

