4.3 Preparing for medical procedures

Children undergoing medical procedures and their families benefit from preparation through the provision of developmentally appropriate information about the procedure [8, 9, 11]. To ensure that the procedure is safe for the child, it is also important to prepare the health professionals that will be involved with the procedure and the environment where the procedure is to be conducted [12].

Procedural preparation is an example of a behavioral (non-pharmacological) pain management intervention [13]. Prior to conducting a medical procedure, it is recommended that 4 key aspects to preparation be considered. Remember to prepare:

1. The child
2. The family
3. The environment
4. The procedural support team

Step 1: Prepare the child

It is important to communicate and acknowledge the procedure with the child.

When to tell a child they are having a medical procedure

The aim for telling a child they need a medical procedure is to provide enough time for the initial anxiety about the procedure to pass so children can plan and rehearse their coping strategies [14]:

- The timing of when you explain the procedure to a child will depend on the child’s age, development and their degree of anxiety.
- Younger (≤ 7 years) and more anxious children can be told on the day of the medical procedure.
- Older (≥ 8 years) children can be told the day before or within the week of the medical procedure [15].

What to tell a child about a medical procedure

Provide clear and honest information about the procedure and provide explanations at a language level appropriate to the child’s abilities:
• Children vary in the amount of information they want to know about a procedure.
• Find out what and how much information they find helpful.

Consider the following questions that a child and their family may want to know about the procedure [9, 16]:

<table>
<thead>
<tr>
<th>What is it?</th>
<th>This is a stethoscope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where does it go?</td>
<td>It goes on your chest or your back</td>
</tr>
<tr>
<td>How does it feel?</td>
<td>It may feel cold</td>
</tr>
<tr>
<td>What is the purpose?</td>
<td>It helps the nurse listen to your lungs and your heartbeat</td>
</tr>
</tbody>
</table>

**How to communicate with children and their family about medical procedures**

BEFORE the medical procedure is the appropriate time to inform of potential discomfort and explain how it will be managed:

• Provide clear and honest information about the procedure.
• Provide explanations at a language level appropriate to the child’s abilities.
• Focus on the positive and incorporate positive or neutral words into your language.
• Use soft language that is more descriptive and avoids the use of medical words that can be fearful or confusing to children

Refer to the Clinical Practice Guideline of Communicating medical procedures to children for further information.

Link: Communicating medical procedures to children

http://www.rch.org.au/clinicalguide/guideline_index/Communicating_procedures_to_families/

**Clinical tip**

The RCH has created a number of resources to help prepare children for medical procedures:
• B positive has videos explaining specific medical procedures for children
  http://www.rch.org.au/be-positive/
• 'Okee in Medical Imaging' App to prepare children for medical imaging
  http://www.rch.org.au/okee/

Step 2: Prepare the family

It is important to prepare parents regarding the medical procedure and how they can best promote their child’s coping ability [3]. Where possible, parental presence during the medical procedure should be encouraged as this can reduce pain-related distress for the child [22].

• A family member should be encouraged to stay during the medical procedure to provide support to the child but provide a choice to be present or not
• When parents are present at a medical procedure include them in the procedural support team and engage them to be a positive support to their child during the medical procedure
• Provide parents with procedural information as this can reduce parental anxiety and enhance the success of the medical procedure [8]
• It may be appropriate to have a conversation about the medical procedure away from the child when preparing the parent to avoid prematurely distressing the child

Step 3: Prepare the environment

There is evidence to support that modifying the environment that a procedure occurs in can positively impact on the child’s perception of pain [17, 18]. Preparing the environment is an example of a contextual (non-pharmacological) pain management intervention [19]:

• Where possible the environment should appear comfortable, calm and include friendly adults [20].
• The setting for the medical procedure should not be overly stimulating with bright noises and loud sounds.
• Consider the impact of the noise from the procedure room on other children and keep the door closed where possible.
• Equipment should be prepared before the child enters the procedural setting and it is recommended that any equipment that may provoke fear be kept out of sight [21].

When choosing the location for the medical procedure it is important to consider if the following resources are available [22]:

• Adequate space
• Maximum privacy
• Adjustable lighting
• Minimal noise and interruption
• Access to agents for pharmacological and non-pharmacological interventions

**Clinical tip**

Consult with the child and their parents about the best place for them is to perform the procedure:

• Performing procedures in a treatment room and avoiding the child’s bed or bedroom can help to create an environment where the child feels safe and secure[20].
• For some children having to go to the treatment room for a procedure can be worse for them.

**Step 4: Prepare the procedural support team**

Prepare the health care team regarding the specifics of the medical procedure with the ACE principles [22]:

• Ask
• Clarify
• Encourage

**Ask questions about the medical procedure**

There are some key questions health professionals should ask themselves when organising a medical procedure [20, 23]

1. **Is this procedure really necessary?**
   • If the procedure is necessary, consider the burden of medical procedures on that day and the week ahead.
• Think about how urgent the medical procedure is. Can you plan ahead and collect all pathology samples at once. If the child has surgery scheduled, cluster as many medical procedures together as possible when the child is anaesthetised.
• Consider if there a better way to perform the procedure for the child and if there is an option for the child to have a choice of how the procedure is performed eg. finger prick or venipuncture?

2. **Who else needs to know about the child’s medical procedure?**
• Medical procedures should be anticipated well in advance and wherever possible time them to ensure that *optimal support staff* are available.
• Consider if there are other health professionals that need to know a procedure is planned such as the child life specialist, the pathology department or theatre.

3. **What is the expected intensity and duration of pain or discomfort for this child?**
• Ensure that topical anaesthesia is applied for all needle procedures unless contraindicated [24] and provide appropriate time for topical anaesthetics to work [23].
• If this is a prolonged or invasive medical procedure consider if analgesia would be appropriate [20].
• Consider procedural sedation if (1) the child expresses great distress regarding being awake for the medical procedure or (2) the child is required to be immobile for a long period of time [22]

Refer to the policy on procedural sedation in ambulatory areas for further information:

Link: Procedural Sedation for Ward and Ambulatory Areas Procedure

http://www.rch.org.au/policy/policies/Procedural_sedation_%E2%80%93_ward_and_ambulatory_areas_%E2%80%93_at_RCH/

**Clarify the medical procedure and procedural plan**

Clarify the procedural plan with the health care team, child and family [20]:

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• Make sure that you confirm that you have the right procedure, the right equipment, the right site and the right child.
• Communicate the procedural plan to the health care team.

Consider the support a child may require during a medical procedure and clarifying the roles of the procedural support team [22]:

• Everyone in the room should have a role in the medical procedure or they should not be in the room.
• At a minimum, there should at least be the proceduralist +/- sedationist and a procedural support person for the child present in the procedural setting.
• If the procedure is expected to be complicated and/or prolonged, plan ahead of time for additional support and have a procedural assistant where possible.
• If additional support staff are required ensure they know their role in the medical procedure.

Role of the proceduralist:

• The proceduralist needs to remain focused on the procedure
• It is the responsibility of the proceduralist to communicate the plan with all involved before the medical procedure begins. Taking the time to plan will help set the proceduralist up for success
• If sedation is required then this is a separate role to the proceduralist and the child’s support person. The seditionist will determine when the child is ready for the procedure to begin.

Clinical tip

• Do not talk to the parent about any results of tests during or at the end of the medical procedure. Do this away from the child.

Role of the procedural support person

• The role of the support person is to function as a procedural coach for the child.
• A procedural coach promotes coping-promoting behaviours and to avoid distress-promoting behaviours [18].
• The procedural coach may be the parent but only if the role does not involve breaking the trust between child and parent.
• If the parent is acting in the role of procedural coach then they should be provided with direction in providing the procedural [11].

• Procedural coaches may also include educational play therapists, music therapists and other healthcare providers engaged to assist with the procedure.

Encourage positive behaviour from the procedural support team

Encourage the procedural support team to demonstrate a positive attitude and behaviours towards procedural pain management [23]:

• One voice should be heard during a medical procedure. When there are multiple voices in a procedure, children can be talked over and the environment may appear chaotic [25].

• Ideally, medical procedures are performed safely by the most experienced health professionals available [8].

• If a junior health professional is performing the medical procedure then minimize any discussion about the procedure in front of the child.

• Aim to undertake medical procedures at a time when optimal resources are available.

• To maintain the trust of the child and family it is recommended that no more than two attempts at a procedure are undertaken [21].

• Be calm and confident when performing medical procedures.

• Remember that a child may not view a medical procedure as a routine part of medical care. It is important to have realistic expectations of the child and their family.