



E-LEARNING RESOURCE LUMBAR PUNCTURES

Introduction

This learning resource has five components:

- [Before you start - preview activity](#)
- [Watch and Learn – video](#)
 - Patient centred care approach for procedures
 - Essentials of lumbar puncture technique
- [Practical tips](#)
- [Patient safety tips](#)
- [Where to now? – post video activity](#)

Before you start

What makes lumbar punctures difficult with children?

Have you seen lumbar punctures done well in paediatrics? If so, in what way?

Scenario

During your Emergency rotation you see a 18 month old with a fever, purpuric rash and headache. The child is listless, dehydrated but with normal conscious state. Parents are particularly worried, tired and stressed.

Before you start (continued)

What things do you need to think about with this scenario?

You might like to consider:

What are the indications for lumbar puncture in the child?

What makes lumbar punctures difficult with children?

Have you seen lumbar punctures done well or not so well in paediatrics? What did you notice?

How will you discuss this with the child and family?

Before you start (continued)

You should consider:

- Communication with child and family including informed consent
- Comfort, reassurance, explanation
- Child may be moving – fearful
- Consider adequate analgesia / sedation
- Good positioning is essential
- Be organised – equipment prepared and accessible

Watch and learn

- Essentials of Lumbar puncture video
- Please click on link below
- [Http://vimeo.com/royalchildrenshospital/review/47700111/aa298ec469](http://vimeo.com/royalchildrenshospital/review/47700111/aa298ec469)

Practical Tips

- Make sure your equipment is set up before bringing child into the room
 - Eg: LP pack, distraction kit, CSF tubes, correct needles
- Planning – ensure adequate staff to help including holding child, monitoring for safe sedation, and supporting parents.
- Positioning:
 - 1. Back needs to be perpendicular to the bed
 - 2. Maximum spine curl
 - 3. Needle 90 degrees to the skin

Patient Safety Tips

- Seek guidance from a senior colleague/supervisor
- Ensure supervision if you have not done many of these
- Ensure no contraindications to LP
- Do not allow any alcoholic chlorhexadine on your LP trolley (risk of intrathecal injection / toxicity)
- Lumbar puncture is a sterile procedure

Where to now?

- What did you learn? Are there still gaps in your knowledge? What do you need to do to get more knowledge, experience and skill in this area?
- Clinical practice guidelines:
http://www.rch.org.au/clinicalguide/guideline_index/Lumbar_Puncture_Guideline/
- Watch, learn and practice— attend lumbar puncture list: contact Cathy Crock by email catherine.crock@rch.org.au or Pager 4433