



GUIDELINE

Suprapubic Aspiration of Urine

Scope (Staff):	All Emergency Department Clinicians
Scope (Area):	Emergency Department

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<http://kidshealthwa.com/about/disclaimer/>

Suprapubic Aspiration of Urine

Pre-Procedure

- The child should not have passed urine in the previous 60 minutes prior to the procedure. If so, feed the child and wait 30-60 minutes.
- If the child is stable it is preferable to do the suprapubic aspiration prior to carrying out any other invasive procedures

General

- Suprapubic aspiration of urine is a simple and safe technique for obtaining an uncontaminated specimen of urine in children
- In stable children, perform first before other invasive procedures like bloods and lumbar puncture (in case the child voids)
- The procedure should be done quickly once you expose the genitals, so prepare everything before you undo the nappy
- Standard aseptic non touch technique with sterile gloves is required

Indications

- Children < 6 months of age who need a urine culture.
- Children < 1 year old who need a repeat urine culture because the previous urine culture is contaminated

Contraindications

- Urinated in the previous 1 hour
- Distended abdomen

- Known coagulopathy
- Skin infection over puncture site
- Urogenital abnormality

Preparation

Staff

- Doctor to carry out procedure
- Nurse to hold the child throughout procedure
- Assistant to catch urine

Equipment



SPA equipment

- 3ml or 5ml syringe
- Alcohol wipe
- 23 gauge needle
- Sterile gloves
- Urine container (yellow top)
- IV pressure pad ('dot')

Procedure

Medications

- Can give a small amount of sucrose to infants prior to the procedure

Positioning and technique



- Confirm the patient has not passed urine in the last 60 minutes. If they have then give a feed and wait for 30-60 minutes.
- The child lies supine in a frog leg position
- The nurse is to hold the child steady and restrain the legs in an extended position
- An assistant is to be ready to catch the urine with an open urine jar, if the patient

passes urine

Check the bladder size /volume using one of the following 3 methods:

1. **Curvilinear ultrasound probe** to check bladder volume:
Transverse view, depth (D) 2-3 cm or Transverse diameter (T) 3.5cm (recommended method) or
2. **Bladder scanner** (minimum 20ml) – scan 3 times to confirm, or
3. **Gently percuss the bladder**, fundus should be 1-2 finger breadths above the pubic symphysis (**ps**)

1. Wipe the skin from the pubis to umbilicus in a circular motion 5cm diameter with the alcohol wipe



2. Insert the needle perpendicular to the skin at 1-2cm superior to the pubic symphysis (the suprapubic crease level) at midline



3. Aspirate gently after the needle goes through the skin. Remember to aspirate as you *insert*, as well as when you *withdraw* the needle.

4. Advance the needle 2-3cm deep **if needed** (i.e. whole length of the 23G needle)

- If urine is not obtained, do not remove the needle, but withdraw it to a subcutaneous layer and redirect it slightly more superior, and then more inferior to the pubic symphysis if needed
- The procedure should be abandoned if still unsuccessful and an alternate method of urine collection should be considered
- Further attempts at **SPA** should be at the discretion of the Senior Doctor on duty

Post-Procedure

Complications

All these complications are rare:

- Transient, gross or microscopic haematuria
- Intestinal perforation
- Bladder haematuria
- Abdominal wall abscess

More

Tags




aspiration, bladder, culture, febrile, septic, spa, suprapubic, tap, urine, uti

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