

Cystocentesis in cats

A guide for veterinary professionals



Step 1: preparation



- Equipment required
 - 5 or 10 ml syringe
 - 23 g one inch needle*
 - Sterile container

**For very large/overweight cats a 1.5 inch long needle may be needed*

Step 2: palpate the bladder



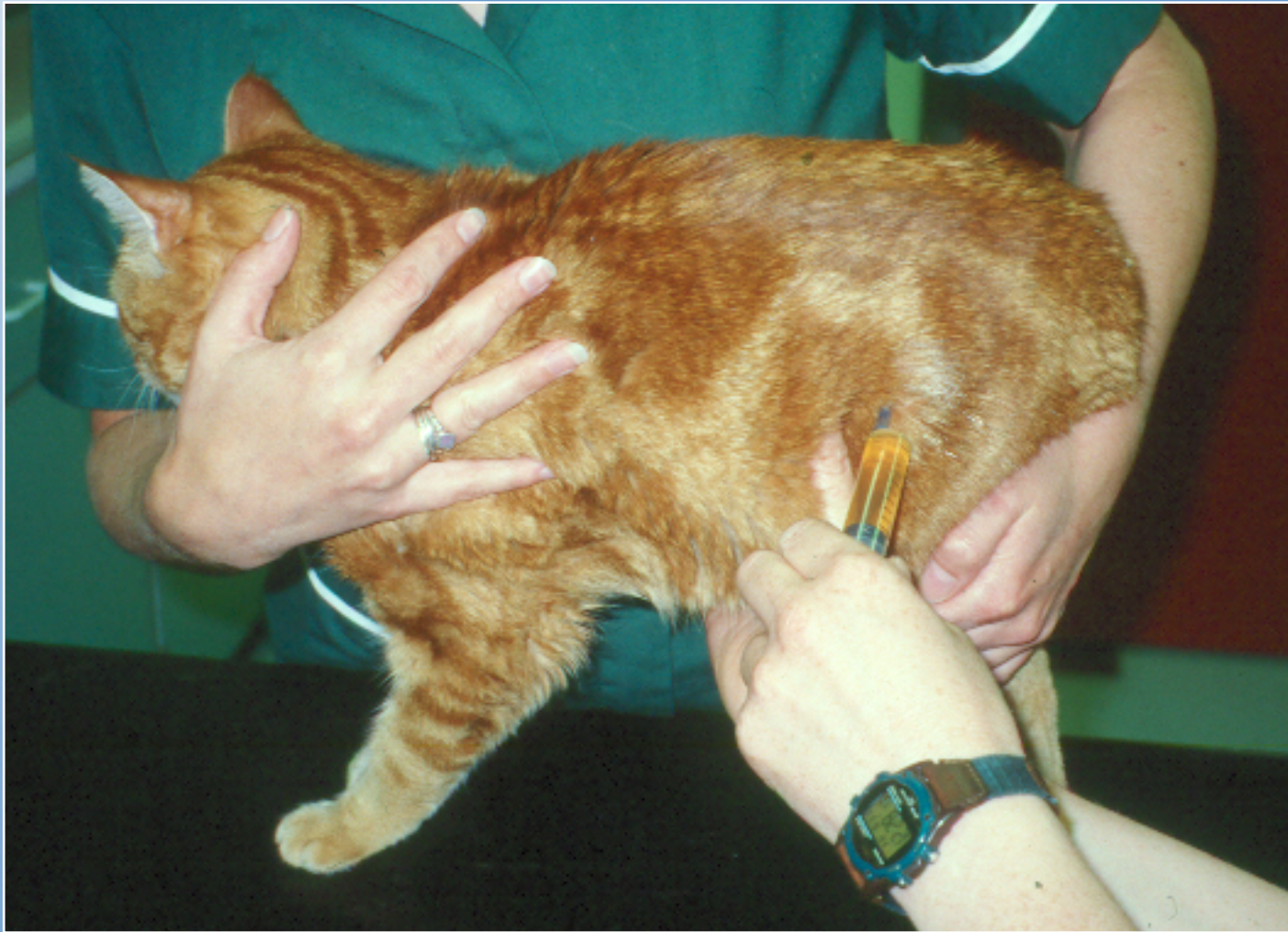
Step 3

- Samples can be collected with the cat in any position:
 - Standing
 - Lateral recumbency
 - Dorsal recumbency
- All you need is a calm cat whose bladder you can feel
- Sometimes it helps to have two assistants: one at each end of the cat gently restraining it and trying to keep it as calm and relaxed as possible
 - For example if lying the cat on his back, have a deep bed underneath to make the procedure as comfortable as possible

Step 4: collect the sample

- There is no need to clip the fur
- Attach the needle to the syringe and remove the needle guard
- Stabilise the bladder using your free hand (the hand that will not be holding the syringe). Once happy, pick up the syringe with your other hand.
- Place the needle on the skin (so that the cat can feel it) then gently pass it through the skin and into the bladder
- Aspirate your sample
- Release your hold on the bladder
- Withdraw the needle
- Empty the sample into a sterile container

Standing cystocentesis



Use the left hand to stabilise the bladder if you are right-handed

Picture included with kind permission of Professor Daniëlle Gunn-Moore, University of Edinburgh

Dorsal recumbency cystocentesis



The bladder is stabilised between the left hand and the bones of the pelvis

caudal

cranial

This cat is anaesthetised and therefore very relaxed

Dorsal recumbency cystocentesis

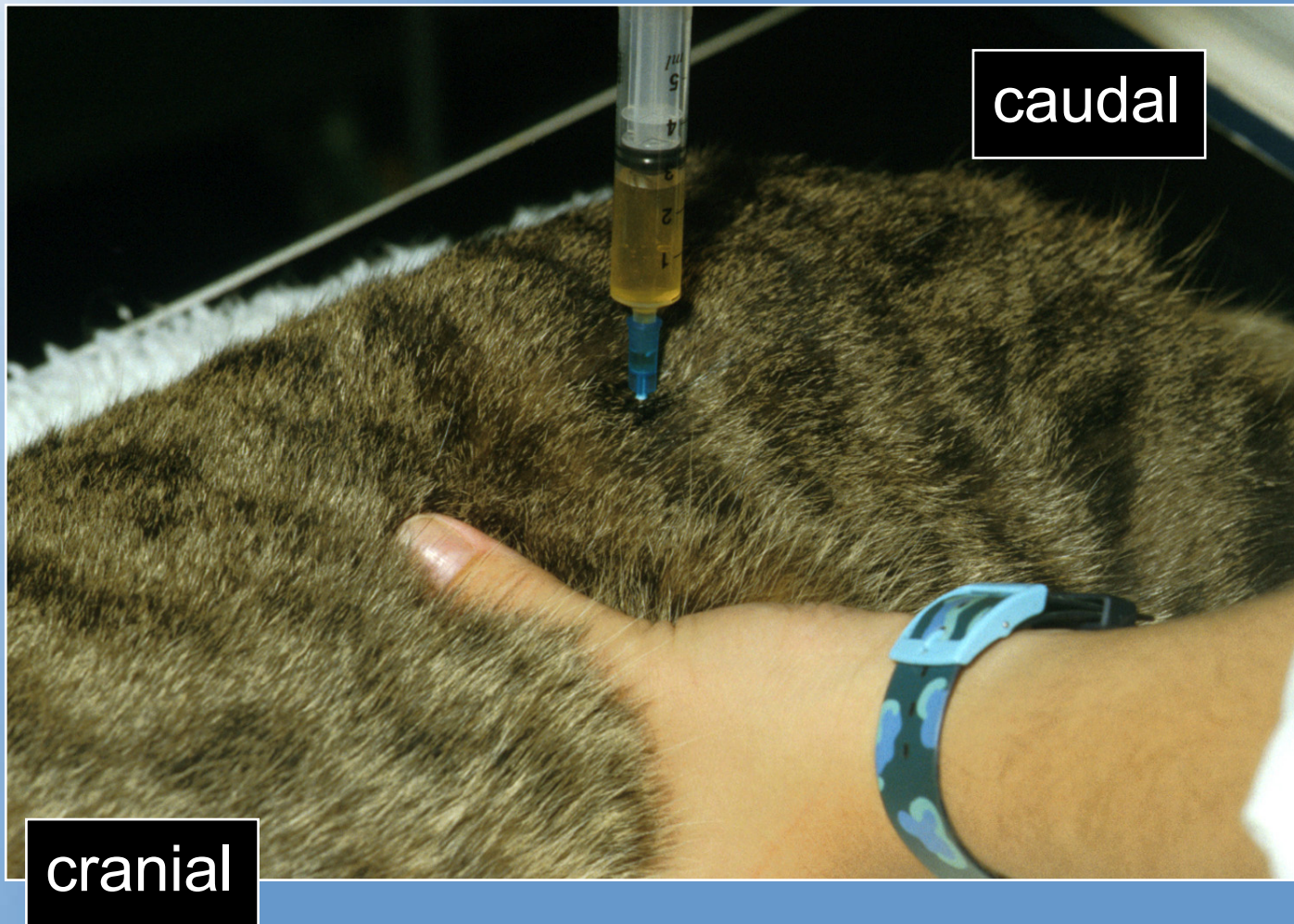


Many conscious cats tolerate this minimal restraint positioning for a conscious cystocentesis

The back legs do not need to be held in most cats

If restraint of the back legs is needed, a second assistant can gently hold one back leg in each hand

Lateral recumbency cystocentesis

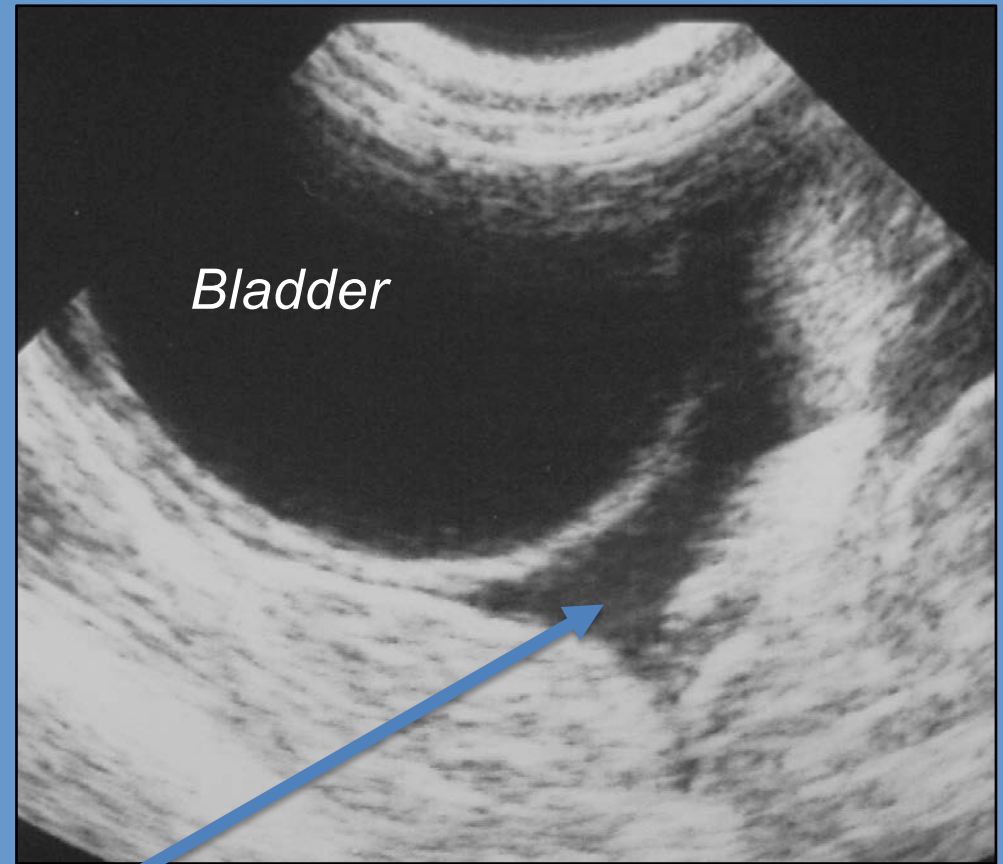


The bladder is stabilised using the left hand (thumb in front of the bladder, fingers gently raising the bladder)

This cat is anaesthetised and therefore very relaxed

Ultrasound guidance

- If the bladder is not palpable or is very small, ultrasound guidance can make cystocentesis possible.
- No need to clip the fur. Just swab with surgical alcohol and apply gel so that the bladder can be imaged.
- NB: it is possible via ultrasound to make a small bladder look large on a screen – it may still be very difficult to sample!



This cat has a small amount of ascitic fluid which can be seen on the ultrasound examination

Contraindications and potential adverse effects

- Cystocentesis is generally a safe and well tolerated procedure
- Adverse effects are rare and include
 - Bruising, haemorrhage, urine leakage and bladder rupture are potential complications in blocked cats (cats with urethral obstruction)
 - Vagal stimulation can cause transient side-effects (retching, panting, collapse) – affected cats recover spontaneously within a few minutes. This is very rare!

Conclusions

- Cystocentesis is generally a safe and well tolerated procedure
- It should not be a painful or stressful experience for the patient
- Cystocentesis should not require sedation or anaesthesia of the patient (unless very fractious)
- It is the ideal way of obtaining a sterile urine sample from a cat

Useful additional information

- Other Free Downloads on vetprofessionals.com
 - Owner's guide to urine collection
- Video tutorials
 - How to take a urine sample



Disclaimer

Vet Professionals has developed this document with reasonable skill and care to provide general information on cystocentesis in cats. This document however does not, and cannot, provide advice on any individual situation. It is not a substitute for advice from a veterinary surgeon on each individual situation. Vet Professionals therefore strongly recommends that users seek, and follow, advice from their veterinary surgeon on any health or other care concerns that they may have concerning their cats. Users should not take, or omit to take, action concerning the health or care of their cats in reliance on the information contained in this document and so far as permissible by law, Vet Professionals excludes all liability and responsibility for the consequences of any such action or omission in reliance on that information.

