VNFUTURES
SCHOOLAMBASSADORS

Case Scenario
Monitoring vital signs

Ambassador notes

This document is intended to provide you with ideas for running a session based on a 'clinical scenario' to demonstrate the aspects of patient care and the role the veterinary nurse has in this journey.

This style of session is more appropriate for older age-groups – from 10 years and older. The scenario and terms used can be tailored to the age-group.

You may decide to use a different scenario, maybe based on one from your recent experience and caseload for example.

Key words marked in bold are potential areas for questions, discussion, and explanation.

You may wish to simplify some of these terms for younger age-groups.

More advanced terms will give you an opportunity to teach children new words and concepts around veterinary medicine and nursing.

There are different ways you could present the scenario.

For example:

Use of a stuffed toy, demonstrating some of the aspects of the case as you talk through it.

Use of an illustrated PowerPoint presentation.

Use of images (remember that consent procedures and best practice for images have been followed).

Student-led – so for example, presentation of the opening scenario, and then asking students to discuss and decide what should or could happen next in the scenario.

Medical emergency "The mystery of the cat who couldn't wee", and the role of the veterinary nurse.

1. [Phone call from client] – A male cat has been **urinating** around the house, which is not normal for him, and is now going to the litter tray, meowing but **not passing urine**.
2. The veterinary nurse on the other end of the phone discusses the possibilities as to why this may be happening and advises the client to bring the cat in **as soon as possible**.

3. The veterinary nurse **advises** the veterinary surgeon and nursing team that the cat is on the way to the practice.
4. On arrival the veterinary nurse **triages** the cat and **weighs** him.
5. The vet **examines** the cat and takes a **full history** from the owner. The veterinary nurse assists in **handling** the cat.
6. The vet **feels** a very large **bladder** and advises to **admit** the cat for **radiographs** of the **bladder** as a **blocked urethra** is suspected.
7. A **blood sample** is taken from the **jugular vein** to check the **haematology** and **biochemistry** to assess for any **kidney damage, elevated potassium levels** or any other abnormalities.
8. The veterinary nurse **runs the blood sample in the in-house laboratory** and **reports the** The veterinary nurse clips the fur from the cats' **foreleg** and inserts an **intravenous catheter**.
9. The vet directs the veterinary nurse to give the cat some **sedation medication** as he is quite **distressed.** They tell the nurse what medication to use and the veterinary nurse **calculates the dose**.
10. The vet checks the dose and then administers it to the cat.
11. The veterinary nurse **monitors** the cat and **prepares the x-ray area** for radiographs
12. The cat is moved to the radiography table and **positioned.**
13. The nurse monitors the cat's **breathing** and **heart rate** and takes the **radiographs**.
14. Evidence of a **blocked urethra** is identified on the radiographs and the nurse gathers the equipment for the procedure to unblock this. (Sterile gloves, catheter, gel, suture material, sample tubes, saline and syringes)
15. The vet decides that the cat should have a **general anaesthetic** prior to the procedure and the nurse assists the vet with the i/v **induction of anaesthesia**, the **intubation** and the **setting up on the anaesthetic machine**.
16. The veterinary nurse **monitors** the patient during anaesthesia, informing the vet if there were any concerns.
17. 18. The vet passes a **urinary catheter** (a veterinary nurse can also perform this task under veterinary direction) and unblocks the urethra. A sample of the blockage material and urine is taken to be **sent away for identification**. The vet sutures the catheter in place and **flushes out the bladder with saline**.
18. The cat is given **pain relief** and an **Elizabethan collar** and is woken up from the anaesthetic.
19. The veterinary nurse removes the endotracheal tube and monitors **the cat's recovery** until **fully awake**.

20. The veterinary nurse fills out the **submission form for the samples** to be analysed, and packages them ready to be sent to the laboratory.

21. The cat stays in the kennel until the vet is happy that the **cat is comfortable** and **passing urine** through the catheter.

22. The veterinary nurse monitors the cat's **demeanour, appetite, urinary and faecal output** and ensures that he has his **prescribed medication**. This is recorded on the **hospital sheet**. They also ensure that he is **comfortable** and provide grooming.

23. When the vet is happy with the cat's **progress**, they **remove the urinary catheter** and collar, and the veterinary nurse **observes the cat's urination** until **passing urine normally**.

24. Under the vet's direction the veterinary nurse discharges the cat. The veterinary nurse explains to the client how to care for him at home and any changes or problems to look out for, explains the medication and **how to administer it**, and how to introduce the cat to the **new food** that has been **prescribed**.

Examples of practical options and/or potential areas for further discussion

Some of these topics are quite advanced and should be simplified for younger children.

Think about and discuss...

(5 minutes in small groups and discuss the answers as an open group. You can choose any of the areas listed in the scenario to create a 'think about and discuss' session).

1.

a) What would you do if you were the owner in this situation?
b) What if this situation happened at 2am?
c) How do you think the cat would feel not being able to urinate?
d) Why is a blocked urethra a medical emergency?
e) If you were the veterinary nurse, what aspects of nursing in this scenario would you be most interested in?

2.

a) What do we mean by a 'history'?
b) Why is it important to have this and record it accurately?
c) Why might the owner find it difficult to remember everything?
d) Where do we record the history?

More practical options and/or potential areas for further discussion

1. Monitor respiratory and heart rates – how we calculate (inspiration and expiration, 15, 30 or 60 seconds) what is normal for a cat / dog, how this compares to human rates.
2. Calculations – scenario with different body weights to work out drug dosages / fluid rates.
3. Positioning in radiographs – use terminology cranial, caudal, dorsal, rostral, DV, lateral etc.
4. Assessing an animal – what would you check and why? (Demonstrate on stuffed toy).
5. What is an intravenous catheter, and why do we use them? (Show, demonstrate).
6. Example of a hospital chart, students can fill this in with their own observations.
7. Intubation – why and how? (Demonstrate using an ET tube).
8. Calculate dose rates for i/v fluids or medications – provide a scenario sheet and calculator including a body weight, drug, and strength. Provide a scenario sheet with a cat's weight and fluid calculation
9. Example of anaesthetic monitoring form, and why and how we fill this in.
10. Anaesthetic monitoring considerations, for example, increased heart and respiratory rate – what could this mean?
11. Pulse oximetry and multi-parameter monitors – what are they and what do they measure and why?
12. Provide some large fluffy cat/animal toys and simulate handling for i/v placement, intubation, radiographic positioning, postoperative recovery.
13. Prepare a cat for positioning for abdominal radiographs (bladder and urethra).
14. Show examples of what happens if we only take one view (if you have radiographs you can use them to demonstrate).
15. Think about what may be considered and fill in a discharge form for the owner (quiet, rest, medication, observation of urination, postoperative appointments, feeding). Have blank discharge forms and ideas as above for the students to think about.

This is an example case, and you can recreate a similar activity using any clinical scenario that you think would be appropriate. For younger children you may choose to use something much simpler.