

How to Write a Case Report

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As veterinary nurses we have so much to give our profession. The nursing care that we give to our patients every day is an important adjunct to veterinary treatment and can influence the outcome of the case.

By now, many of you will be aware of the exciting initiative within our profession, the Accredited Veterinary Nurse (AVN). The AVN is a joint scheme, developed by the Veterinary Nurses Council of Australia in conjunction with the Australian Veterinary Association, and was launched at the 2002 VNCA conference in Perth. Part of the continuing education criteria is the completion of a case study. This refers to the “accurate observation and recording of a patient who has been nursed by the applicant during the course of a treatment or procedure”.

It can be tough to sit down at the end of a long working day and have to write about what you've done. All you really want to do is relax or get on with your other full time job of looking after other family members! Hopefully, after reading this article, writing a case study may not seem like such a difficult task after all, and it may even help you to appreciate the level of nursing care that you already provide.

Where do you start?

The first step is to decide which case you are going to write about. The most important tip is to keep it simple. Don't choose a complicated case because you think it will be interesting, at least not until you have written up a few simple cases! Remember that we are interested in what you have done and not the intricacies of the surgical procedure. Try to choose a case that has had a lot of nursing input from you personally.

What information are you going to include?

The criterion suggests that you include patient details, history, presentation, attending vet's assessment, treatment, medication details, progress and outcome. You'll also need to include details of what you've learned throughout the process of documenting the case study. It makes life easier if you can record some of these details at work rather than waiting until you get home and trying to remember what you did. Forming a basic template for the case study will give you guidance when jotting down notes.

Case Study Template

| | |
|--|--|
| <i>Patient details:</i> | |
| <i>History:</i> | |
| <i>Presentation:</i> | |
| <i>Attending vet's assessment:</i> | |
| <i>Treatment and medication details:</i> | |
| <i>Progress:</i> | |
| <i>Outcome:</i> | |

Patient details

Include information such as the patient's name, species, breed, age, sex and weight.

History

This paragraph should include any history relevant to the case. You may also wish to include the patient's vaccination history, details of the internal and external parasite prevention program and any pre-existing special dietary requirements.

Presentation

Record the patient's body condition, demeanour and presenting clinical signs. It is also important to note if the disease/condition is chronic or acute.

Attending vet's assessment

As veterinary nurses we are not expected or allowed to diagnose. However, it is important that we have a basic understanding of the physical examination technique and are able to record details appropriately. Information in this section would include the results of the physical examination, radiographic findings and clinical pathology results. It may be easier to present this information in a table.

Physical examination

| | |
|---|--|
| <i>Rectal temperature</i> | |
| <i>Pulse rate</i> <i>Pulse quality</i> | |
| <i>Heart rate</i> <i>Heart sounds</i> | |
| <i>Respiratory rate</i> <i>Lung sounds</i> | |

Clinical Pathology

| | |
|-------------------------------|--|
| <i>Packed Cell Volume</i> | |
| <i>Total Protein</i> | |
| <i>Blood Urea Nitrogen</i> | |
| <i>Creatinine</i> | |
| <i>Urine Specific Gravity</i> | |

Radiographic findings

Lateral and cranio/caudal radiographs revealed a closed comminuted fracture of the proximal third of the right femur with one triangular shaped fragment in addition to the two main fracture fragments. A lateral radiograph of the thorax and abdomen revealed no further abnormalities although the rectum was full of faeces.

Treatment and medication details

Treatment may include intravenous fluid therapy, medication and surgery. You should include all aspects that you are involved in. For example:

The right cephalic vein was catheterised with a 22 gauge over the needle catheter and injection cap. Pre anaesthetic medication consisted of Acepromazine and Pethidine administered by intramuscular injection 60 minutes prior to the procedure. Anaesthesia was induced with a total dose of 20mg thiopentone allowing the patient to be intubated with a 3.5mm uncuffed endotracheal tube. Anaesthesia was maintained with halothane vaporised with oxygen and nitrous oxide via an Ayres T- piece with a Jackson Rees modification at 2 litres per minute.

Intravenously fluid therapy consisted of lactated ringers' solution administered at 10 mls per hour during surgery. Cefuroxamine was administered intravenously. A warm water enema was performed to evacuate the rectum prior to surgery. The patient's right hind was closely clipped from the tarsus to the spine and the inguinal region. The area was scrubbed according to protocol and the patient moved to theatre and placed in left lateral recumbency on a heated waterbed and a diathermy plate. A conforming bandage was placed around the tarsus of the right hind and the limb was raised and attached to a drip stand using a tie. This allowed the entire limb to be surgically prepared.

Surgical scrub protocol

Using gauze swabs, dilute chlorhexadine scrub is used to clean the entire clipped area until the site is clean. The surgical scrub is then commenced at the proposed incision site working towards the periphery. Once the hairline is reached, the swabs are discarded and the process is repeated 3 times. A 70% alcohol spray is used to cover the entire site. Wearing sterile gloves a povidine iodine solution is the 'painted' onto the surgical site using sterile dressing forceps and sterile gauze swabs.

Instrumentation consisted of:

- *A basic surgical pack*
- *Cerclage wire*
- *Pliers*
- *Jacobs Chuck, chuck extension and key*
- *Wire passer*
- *Gelpi retractors*
- *Periosteal elevator*
- *Small ratchet fragment holders*

Instruments for a basic surgical pack

5 x plain cloth drapes
1 x lotion bowl
1 x Gallipot (for disposal of sharps)
4 x Allis tissue forceps
6 x Artery forceps (straight)
6 x Artery forceps (curved)
1 x Genes rat tooth forceps
1 x dressing forceps
1 x Metzenbaum scissors
1 x Mayo scissors (curved, blunt ended)
1 x Mayo scissors (straight, pointed)
1 x No 3 scalpel handle
1 x No 4 scalpel handle
10 x 10cm² gauze swabs

A cloth drape was placed on the operating table and the limb was lowered and the tie removed to allow a sterile foot bag to be placed over the distal limb. This was then secured using a sterile conforming bandage. Additional plain cloth drapes were arranged to surround the surgical site and cover the patient.

An incision was made on the lateral aspect of the femur at the site of the fracture. The muscles were the dissected until the fracture site could be visualised. To allow the surgeon to manually reduce the fracture, the scrubbed assistant manipulated the limb. Two pairs of bone holding forceps were applied to stabilise the fracture in this position.

A 7/64-intramedullary pin was measured against the radiograph and fitted into a Jacobs Chuck with a chuck extension. The greater trochanter of the femur was located and using a scalpel and small incision was made in the skin at this site. The pin was then driven distally to engage cortical bone in the distal epiphysis of the femur. A wire passer was placed around the femur at the point of the fracture and a length of 22-gauge cerclage wire was threaded through. The wire passer was then removed leaving the wire in place. A second wire was placed in this fashion. The bone holding forceps were removed and using pliers the wires were tightened, 1cm apart, around the fracture site to secure the fragments.

The intramedullary pin was pulled out slightly and cut using a pin cutter. The pin was then reinserted using a K-wire bender.

The wound was then cleaned and a light dressing was placed over the incision.

Progress

This should include the period immediately post treatment and continue for the duration of hospitalisation

Immediately post surgery the patients rectal temperature was 95.4° F. The patient was returned to the ward and placed on a heated pad and temperature was monitored at thirty minute intervals until normothermic (approximately 90 minutes later).

Ketoprofen 2.5mg was administered via sub cutaneous injection with instructions to provide additional analgesia with Pethidine as necessary. Recovery was smooth and the patient did not appear to be painful.

The patient remained quiet and dull for 12 hours post surgery and rectal temperature was 104°. Ketoprofen was again administered via subcutaneous injection and cephalixin 50mg was administered per os 3 times daily. The patient was eating well and able to move around the cage later that day.

48 hours post surgery the patient was bright and showing no signs of distress. Normal urine and faeces had been passed overnight in the litter tray and rectal temperature was normal.

Although the patient was not weight bearing on the affected limb it was decided to send her home with a 4 day course of Ketoprofen 2.5mg once daily and a further 2 days of cephalixin.

An enema was performed prior to surgery, as the rectum was full of faeces. It was assumed that the patient would be in some degree of discomfort post surgery and therefore unwilling to strain to defecate.

Signs of pain in the cat include anorexia, hyperthermia, tachypnoea, tachycardia, aggression and/or depression.

Outcome

This should include any follow up appointments such as suture removal or further treatment. For example:

The patient was re-examined and radiographed 4 weeks later. It was found to be weight bearing and callus formation was satisfactory. The owner was advised to limit exercise for a further 4-6 weeks.

Summary

Include here what it is you've personally learned from this experience. This might include that you learned how to conduct research, that you learned about a particular surgical or medical procedure or process or that you refreshed existing knowledge about an aspect of nursing.

General Points

1. Avoid using abbreviations and acronyms unless an explanation is given.
2. Use generic names of drugs, not trade names.
3. List all references
 - Journal references: Author, title of article, name of journal, journal number, page numbers and year of publication.
 - Book references: Author, Title of Book, name and location of publishers and year of publication.
 - Chapter within a book: Author, name of chapter, name of book, editors of book, name and location of publishers, year of publication and page numbers.