Johanna Page RVN, MBVNA, PHC

Jo is head veterinary nurse at Orchard Veterinary Group. She has a keen interest in diagnostic imaging and genetic health and is also a clinical coach for several of the student nurses at the practice. She is a Royal Canin Pet Health Counsellor and has almost completed her Diploma in Advanced Veterinary Nursing. She lives in Somerset with her partner and their three dogs.

To cite this article use either
DOI: 10.1111/vnj.12073 or Veterinary Nursing Journal Vol 28 pp324–326

Implementation of nursing care plans: a review of three cases – Part 3

Johanna Page RVN, MBVNA, PHC
Orchard Veterinary Group, Wirrall Park Rd, Glastonbury, Somerset, BA6 9XE UK

ABSTRACT: Nursing care plans tend to be applied wholeheartedly or not used at all in general practice. This is the final article in a series that has reviewed the author's use of nursing care plans for a variety of patients in a first-opinion practice.

CASE 3

Medical treatment & nursing care post-Caesarean section

Even experienced breeders will have complications with litters, that they do not foresee, and as a result may need to seek urgent veterinary attention.

'Gem' was a 4-year-old Corgi, in good body condition and with no underlying medical issues. She presented at the surgery at day 65 of her pregnancy after showing a slight change in behaviour but no clinical signs of whelping.

After a discussion with the owner, and taking the history into consideration, it was decided that performing an emergency Caesarean section was the most appropriate course of action to follow.

'Gem' was induced with propofol (3.8mls), maintained on 3 litres of O_2 and 2% Isoflurane. The surgery was successful and six puppies were delivered, revived, and checked for any abnormalities. Once the bitch had recovered and was happy suckling her pups, she was sent home.

Several days later, the client called to report that three of the six puppies had died and she had realised that the bitch had not been producing milk. The remaining three puppies were very weak and all had contracted aspiration pneumonia because the owner had tried to hand feed them 'formula milk' from a syringe.

After a lengthy discussion with nursing staff, the owner agreed to temporarily hand the puppies over to one of the experienced, qualified nurses (herself a breeder) to hand-rear and wean, and to medicate them as required.

On clinical examination, the three remaining puppies had all lost weight since birth. They showed signs of cyanosis, increased noise in all lung fields and they were dehydrated.

Following examination, the vet prescribed clavulanate-potentiated amoxycillin (Synulox Palatable Drops 50mg/ml, Pfizer) at a dose of three drops twice a day.

Care plans

A nursing care plan was created, based on a combination of the Roper-Logan-Tierney Nursing Model and the Ability Model.[1 & 2] The most relevant activities were listed, these being:

- maintaining a safe environment
- breathing
- eating and drinking
- elimination
- sleeping
- death and dying

This care plan was carried out in the following ways.

A feeding plan was created to ensure the puppies were being fed the right amounts

© 2013 John Wiley & Sons Ltd

Figure 1. A feeding plan was created to ensure the puppies were being fed the right amounts at the appropriate times

at the appropriate times (**Figure 1**). There was space on this sheet to write down weights every 24 hours to ensure further weight loss was avoided.

Each puppy was identified with a coloured marker on its leg, which avoided the need to put small collars around their necks that might have become caught on limbs of other puppies. This went some way to ensuring a safe environment was maintained.

Each puppy was allocated its own space on the feeding chart to ensure it wasn't being mixed up with one of its siblings.

There was also space on the feeding chart to indicate when the antibiotics were to be administered to treat the aspiration pneumonia that the three puppies had contracted.

They were also at an increased risk of infection because they had ingested a limited amount of their mother's milk and colostrum and, therefore, lacked the antibodies from this to help stimulate their immune systems.

Day-to-day living

In order to keep the puppies safe from harm, they were kept in a large dog crate that gave them plenty of room to move around, yet still kept them safe from harm. The crate had a soft VetBed inside to absorb any fluids and help with insulation, thus helping to keep the puppies warm (**Figure 2**).

A heat pad was placed in half of the crate which allowed the puppies to move away from it if they wished. Finally, a large blanket was draped over the top and sides to keep it warmer and free from draughts, and to aid with sleeping.

Because of the health status of each puppy, it was very important to monitor the respiratory rate and pattern of each individual. Potential problems (Ability Model) would be further deterioration of one or all of the puppies and this could result in death.[2]

If the condition of any of the puppies had worsened, veterinary attention would have been sought immediately in an attempt to rectify the problem.

Given the age of the puppies, eliminating was something with which they did need assistance. The normal routine would have been their mother licking the genital and anal area to stimulate urination and defecation; but as she was not present, it was the responsibility of the nurse to carry out this task.

Damp cotton wool was rubbed gently but firmly around that region to replicate the same sensation and encourage the puppies to eliminate. This was done before and after each meal to ensure constipation did not become a problem.

As the puppies were neonates, they spent the majority of their time sleeping. This was not a problem for them to continue, provided their sleeping arrangements were warm, dry (free from urine patches or faecal contamination) and quiet. The heat pat was checked to ensure it was not too hot and did not cover the total floor space for the puppies, ensuring they had an area that was cooler to move to if they felt too hot.

After several weeks of around-the-clock nursing, the puppies were clinically much better – they had all put on weight, their breathing was normal and they all had very healthy appetites.

Conclusion

This case outlines very clearly that just because a dog has had one litter of puppies, it does not mean that the rearing of further litters will be straightforward.

The nursing care involved in this case was very intense and involved a great deal

Figure 2. The crate had a soft VetBed inside to absorb any fluids and help with insulation

© 2013 John Wiley & Sons Ltd

Figure 3. The puppies returned to their owner eating solid puppy food

of dedication from the nurse who was looking after the puppies.

The nursing care plan was a very useful tool to implement because of the need for intensive nursing care and the fact that there were three patients to consider. After five weeks of hand-rearing, the puppies returned to their owner eating solid puppy food and ready to start integrating into household life in preparation for their new homes at the age of eight weeks (**Figure 3**). vnj

References

1. Brown (2012). *Experience of Designing and Implementing a Care Plan* http://www.rvc.ac.uk/Undergraduate/veterinary-nursing-diploma/docs/Brown-2012-Experience-of-designing-and-implementing-a-care-plan-in-the-veterinary-environment.pdf Last accessed 20th June 2013.
2. Orpet & Jeffery (2007). *Ability Model*. Available: http://www.myftraining.com/Docs/Care%20Plan%20-%20Using%20the%20Ability%20Model.pdf. Last accessed 19th June 2013.

Additional reading

BSAVA (2011). *BSAVA Textbook of Veterinary Nursing*. 5th ed. Gloucester, BSAVA. p349.

© 2013 John Wiley & Sons Ltd