

Reducing Stress & Pain of Dogs in the Veterinary Clinic

Evelyn Walker

For most canine companions, visits to the veterinarian can be a very stressful experience. Stressors such as unfamiliar surroundings, removal from family, and procedures inflicted by strangers could potentially exacerbate pain and subsequently slow recovery. By recognising and anticipating discomfort or pain early on, modifying the hospital environment, structuring human contact, and providing adequate pain relief, the welfare of the canine patient can be significantly improved during visits to the veterinarian.

It is desirable that all veterinary personnel learn to recognise signs of pain in their patients. Clinical manifestations of pain in canines include: guarding of painful areas; dullness; hunched posture; stiffness; vocalisation; avoidance; agitation; inappetence; or lack of self-care (Flecknell *et al.*, 2000; Hansen, 2005). However, pain assessment can be challenging, since some dogs will disguise their pain as many wild animals do (Flecknell *et al.*, 2000). This may be why some dogs might limp at home but not during the veterinary consult.

In addition to pain recognition, veterinarians and support staff should be aware of the pain likely to be experienced by certain procedures. By anticipating the severity and duration of pain prior to the painful experience, more efficacious analgesic protocols for the canine patient can be implemented (Hansen, 2005; Shaffran, 2005). Improvements or lack thereof in pain management should be documented by logging observed signs of pain or distress. Appropriate analgesic therapy should not only alleviate pain, but also aim to restore appetite, mobility and self-interest (Hansen, 2005). Based on the above factors, animal welfare can therefore be improved by adjusting drug therapy regimens based on individual canine needs.

Appropriate pain management in conjunction with providing a safe recovery environment for post-surgery or critically ill patients can help improve animal welfare by reducing risks of injury and stress. While recovering in their cages after surgical procedures, dogs often exhibit aberrant behaviours such as rolling, thrashing, falling, vocalising, shaking, self-mutilation, tachypnea, or attempts to escape (Shaffran, 2005). These behavioural changes may be due to pain, stress, or reactions to narcotics or general anaesthesia (Shaffran, 2005). Self-induced trauma from these aberrant behaviours and pain associated with surgery can be minimised by providing sufficient padding in the form of towels, blankets, or soft recovery mats. Heating pads or hot water bottles can also help alleviate discomfort.

Providing a quiet recovery ward away from busy hospital activities with dimmed lighting and minimal handling can also help reduce stress levels in the hospitalised patient. Any additional treatment required that is painful, unpleasant, or stressful (such as venipuncture, drug administration, bandage changes, palpation, examination) should, if possible, be performed outside the recovery cage (Shaffran, 2005). Patient comfort and security can thereby be improved by designating the recovery cage to be a 'safe zone' that is removed from noxious stimuli (Shaffran, 2005).

Furthermore, multiple treatments administered outside the safe zone should be grouped together if possible. By grouping treatments, disruptions to peaceful sleep and rest are kept to a minimum (Shaffran, 2005).

In addition, human contact with hospitalised patients should not be restricted just to patient monitoring and treatment procedures. Human contact in the form of grooming, petting, feeding, speaking in soothing tones, and massage can all help reduce stress levels and consequently minimise pain. Massage, using long, slow, firm strokes for 1-2 minutes can even help appease a fearful dog in an unfamiliar environment (Overall and Dyer, 2005). To prevent negative associations with human contact, a good clinic practice should heed a ‘three to one’ rule: for every unpleasant or invasive experience, three positive experiences should follow (Shaffran, 2005).

Animal handling and physical restraint of dogs for examination or clinical procedures can be stressful for some dogs. One should begin using the least amount of restraint practical and gradually increase the amount of restraint as needed to maintain control over the animal (Crow and Walshaw, 1997; Wojdak, 2003). Environmental, behavioural, and discomfort factors associated with the procedure will influence the amount of restraint needed (Crow and Walshaw, 1997). An anxious or frightened dog, for example, might feel safer in a quiet room away from busy or noisy clinic activities. If a muzzle is needed, soft nylon or basket muzzles can be used. Stress associated with muzzles might be reduced with basket muzzles since mouth movement is unrestricted. One veterinarian suggests smearing peanut butter across the basket muzzle. Thus, the dog spends more time licking at the peanut butter rather than pawing at the muzzle (Horlings, 2005).

Environmental enrichment in the form of auditory stimulation can also alleviate stress levels. Classical music (Wells, 2004) and more recently dog-laughter have been documented in reducing anxiety among shelter dogs (Simonet *et al.*, 2005). Shelter dogs exposed to classical music barked less and spent more time resting (Wells, 2004). Similarly, shelter dogs exposed to recordings of dog-laughter (‘pronounced breathy forced exhalations’) exhibited significantly less behavioural signs of distress (lunging, growling, barking, pacing, panting, salivating and avoidance) and increased pro-social behaviour (approaching front of kennel, sitting, lying down, play behaviours, etc.) (Simonet *et al.*, 2005). Although studies of dog-laughter and classical music have not been conducted in a veterinary setting, perhaps the same stress-reducing benefits could be achieved in hospitalised canine patients.

Other strategies to ameliorate dog stress in the veterinary setting include the use of pheromonotherapy, such as dog-appeasing pheromone (DAP). DAP mimics the natural comforting pheromones produced by the lactating bitch to help neonates feel safe in their environment. It is also sometimes produced by the ears of mature dogs (Mills, 2005). Experimental evidence demonstrates a 14% drop in heart rate among dogs exposed to novel objects in the presence of DAP than in a DAP-free environment (Mills, 2005).

An effective stress and pain management program for dogs within the veterinary setting should therefore integrate observation of pain- and stress-related signs, careful analgesic planning and monitoring, and environmental enrichment.

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