

NAME: Gizmo

BREED: Shih Tzu

AGE: 3YR

PROBLEM: Prolapsed Intervertebral Disc

Diagnosis

Gizmo was presented to the Vet with hind limb paralysis. He had struggled to return into the house the night before after going to the toilet and the following morning he had no control over his hind limbs or toilet functions. Gizmo had not suffered a trauma that his owner was aware of and his present condition was a major concern for such a young dog. Any sudden loss of movement or sensation of any limb should be investigated immediately.

Gizmo's examination revealed he had no proprioception (the body's ability to recognise where the feet are,) of his hind legs but he did have deep pain. These signs meant that the spinal column was intact but the nerves had been damaged. The vet suspected either a disc had prolapsed or possible meningitis as his neck was causing him some discomfort.

Gizmo was admitted for myelography. Myelography involves surrounding the spinal column with a special dye so that any damage can be seen on X-ray. * Picture 2. For myelography a needle is inserted between the skull and the first cervical (neck) vertebrae and the dye is injected through the needle and then the patient is held in a vertical position to allow the dye to flow down around the spinal column. X-rays of different angles of the spine showed that there was compression of the spinal column in the lumbar region. The compression was due to a disc rupture. The decision was made to surgically remove the ruptured disc nuclei. * Picture 3.

Treatment

The spinal surgery was performed by one of our own vets who has extensive knowledge of orthopaedic and spinal procedures. The surgery involved entering through the thoracic muscles (the muscle overlying the top of the ribs) and exposing the spinal column. Once the disc was located it was a delicate procedure to remove as much ruptured disc material as possible. This alleviated the compression of the chord. The vet then burred into the side of the disc; to create an escape for any more disc material, so that it would not push upwards again. Picture 3. The muscle and skin were then closed to leave a small scar on the surface. It can take up to 6 weeks to regain most of the normal function after an operation of this kind.

The next day gizmo's sensation to pain had improved but he could make no voluntary movement of his hind limbs or tail and could not recognise a full bladder, so it had to be manually expressed.

Recovery

2days – The nursing team began Gizmo’s physiotherapy treatment. His physiotherapy included warming the muscles and performing basic movements of his hind limbs, to prevent atrophy (muscle wastage) and improve muscle memory.

4days– Continued with physio but Gizmo showed no voluntary movement and could not empty his bladder.

7days– Gizmo started to wag his tail during the physio sessions and had a little bit of resistance from his hind limbs during his exercises. This felt like a breakthrough in his recovery.

8days– Gizmo was allowed a sleep over at home, as he was missing his mum, we thought a trip home would hopefully motivate him to improve.

11days – For the first time Gizmo was showing his owner he needed the toilet. The fact he could recognise bladder discomfort and could pass a small amount of urine on his own was another big step forward.

3weeks – Gizmo had continued to improve during physiotherapy and hydrotherapy sessions. He could now stand for a few seconds unaided. He was managing to move in the water but was still struggling with proprioception.

1month – For the first time he managed to walk unaided for a few steps, even if he was a little wobbly on his feet.

7weeks – There was a big round of applause when Gizmo walked into the practice all by himself!! He was still knuckling slightly on his hind paws, but he no longer needed a sling and the physiotherapy had stopped. He even tries to chase his ball around the garden.

Gizmo has been an outstanding patient. He has never grumbled or got upset with any part of his treatment. He wags his tail at all the staff. We think he secretly enjoyed his shampoo and set after the hydrotherapy sessions. He has made his mum very proud recovering so well from such an ordeal.