



Royal Animal Hospital – Surgical and Medical Procedures

Internal Medicine

Our veterinarians have the expertise to diagnose and treat any disease/illness your pet may develop. We routinely deal with illnesses of pets referred to us from our colleagues - we are happy to work with your regular veterinarian in diagnosing and treating your pet's illness.

Anesthesia

Royal Animal Hospital uses the most up to date anesthetic protocol available. The safest available for pets is isoflurane gas anesthesia. We place intravenous catheters during anesthesia to allow the administration of intravenous fluids and analgesia. We use multimodal monitoring and have special monitors that can watch the blood levels of carbon dioxide and oxygen. We have blood pressure monitors and ecgs too.

Anesthesia tailored to the individual pet's needs - the pet's age or disease may dictate a special protocol for safety.

Dentistry

We perform dental scaling and polishing (prophylaxis) for dogs and cats. To do this we utilize ultrasonic scaling technology and a high speed polishing unit. In addition, during the dental procedure, we evaluate the oral cavity for health and offer solutions for diseased teeth and gums (gingivitis). We also can perform dental x-rays to better diagnose and treat dental disease in your pet.

Surgeries

Apart from the routine surgeries we perform like for instance the spaying and neutering of your pets, we also do complex surgeries like orthopedic surgery. Herewith follows some examples & explanations of other intense surgeries we are proud and able to perform in the Middle East with direct referral to BVC's surgeon Dr Jonathon Hale.



1. Cruciate Disease

Rupture of the cruciate ligament is one of the most common orthopedic injuries in dogs.

The cruciate ligament is inside the knee joint.

The signs are limping on a back leg. The limp may start in different ways. Most often it's a gradual limp, it can be sudden though. It can affect both back legs at the same time in which case the dog may be reluctant to walk (looking like the back end is paralyzed).



Cruciate ligament rupture is thought to be a degenerative condition. That means the ligament prematurely wears out and then breaks. Dogs as young as six to twelve months particularly in some of the very large breeds such as Rottweilers can be affected. All breeds are at risk of cruciate disease although the bigger the breed of dog the more it affects them.

There are numerous ways of treating the condition. In small breed dogs under a 5kgs in weight it may be possible to let nature take its course and still have a satisfactory outcome. In large breed dogs leaving the injury untreated can result in complications, like tearing of other structures in the joint, like the cartilages.



There are continuously evolving surgical techniques that have been used to treat cruciate disease. From nylon sutures, to grafts, to osteotomies (Tibial Plateau Leveling Osteotomy TPLO, Triple Tibial Osteotomy, Tibial Wedge Osteotomy, Tibial Tuberosital Advancement TTA). Some comparisons are below.

I think we have some valuable experience that can be used to guide you through the choices. And through our knowledge of the various procedures, risks, and outcomes, we have evolved a basis on what we currently do for these cases, which generates very successful outcomes. We have a nice balance between lack of invasiveness and a speedier safe recovery.



So what we have arrived at doing for large breed dogs is a mini arthrotomy and modified Tibial Tuberosital Advancement TTA. The arthrotomy allows us to clean out remnants of the damaged ligament, check and treat cartilage injuries and to flush the joint. The TTA rearranges the forces in the joint to return function to the joint so that the dog can walk (and run and play) without the ligament and without damaging the cartilages.



Comparisons of different techniques with my comments
Nylon sutures – easy to put in (also easy to put in incorrectly), snap after a 3-4 weeks, the idea is that it holds the joint stable until the

soft tissues strengthen. The nylon can be put in too tightly, can tear out or snap prematurely. Can have a risk of a late meniscal cartilage tear. I wouldn't say this is a bad choice. Recovery tends to be slower than with TTA. The evidence at 3-6 months out follow-up is that these dogs catch up and do as well as the TTA patients. Careful case selection is necessary. We can guide you as to if your pet is a suitable candidate.

Facial grafts (also call Over The Top OTT) – not easy to put in. Replacement the ligament. However in my experience the functional results are not great and after all that is what matters – not whether there is a new ligament there or not.

TPLO – it's an aggressive surgery – the cut is across the weight bearing axis of the leg. Failure of the osteotomy to heal would be serious; equivalent to having a broken leg that won't heal. Have additional uses as can be used to correct rotation of the lower part of the leg. A useful surgery in the hands of surgeons able to perform several of these every week. The UAE doesn't generate enough cases.

TTA – a much less aggressive way of achieving the same effect as TPLO. The cut in the bone is away from the weight bearing axis and therefore a safer alternative. A bone graft is placed in the cut bone site to encourage healing. Recovery is very rapid with most dogs comfortable enough to put a little weight on the leg the day after surgery.



"Did you know - [Dr Jonathan Hale](#), the UAE's most reputable spinal surgeon, is the only vet in the Middle East registered with the internationally acclaimed company - [KYON](#) Veterinary Surgery Products - Who has been specializing in orthopaedic equipment for over a decade. Dr Jonathan is our primary referral veterinarian to perform orthopaedic surgeries at RAH."

2. Myelography and Spinal Surgery

Back problems caused by ruptured discs are not uncommon in certain breeds of dogs like Dachshund and Pekingese.

The dogs usually present unable to use their back legs. Milder cases may have wobbly back ends when they try to walk. Usually the signs come on very rapidly.

In addition to being unable to walk some patients are not able to pass urine and this is something that needs to be recognized and addressed within 24 hrs.

The inability to walk is caused by squeezing of the spinal cord by disc material.

Our experience is along the following lines

Option A

Conservative management involving cage rest. Has about a 60% chance of success for most mild to moderate cases. Not suitable for severe cases. The recovery is slow about 2 months

on average needed before return to walking. If surgery is attempted at a latter time it may not be possible to remove the disc material. So a prolonged period in the cage with bladder expressions twice daily in some cases.

Option B

Surgery removes the disc material which is compressing the spinal cord. Has a success rate of 90%. Recovery is usually within a week or two. We use a minimally invasive technique just removing bone from one side of the spinal cord to reach the compressed spinal cord. A myelogram is needed to indicate which site and side to operate on.

We recommend avoiding tablet medications like non-steroidal medication and steroids before surgery as they increase the bleeding at surgery.

3. Brachycephalic Airway Surgery

Pugs and Bulldogs that have difficulty breathing may have nasal openings blocked by folds of their nostrils (stenotic nares) and/or long soft palates. These problems are associated with development of a short skull.



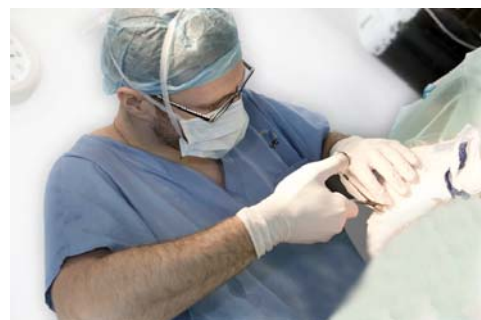
The signs are usually noisy breathing. Some dogs may get into distress when required to exert themselves on walks or in hot weather.

The decision to do surgery on these cases is a fine judgment and we would be happy to provide advice on whether your pet is suitable.

The nose is tackled by a simple widening procedure that involves removal of a small wedge of tissue and closure with two or three fine sutures that dissolve out with time. There are rarely any complications.

The soft palate is more complex to treat. The surgery involves cutting and suturing the palate to shorten it. The most risky part of it is during the recovery period when we need to worry about swelling of the newly trimmed soft palate. The pet has to breathe over the new operated site once the anesthetic tube is removed and there is a critical first few hours to get through. Usually everything is fine.

My advice is to do whats needed. In other words if the pet is unable to breath because of a long palate then surgery with its attendant risk may be warranted. Leaving a pet with stenotic nares and a long palate may result in collapse of the larynx from the negative pressure associated with breathing against an obstructed airway. Try pinching your nostrils closed with your fingers and then breathing in through your noses - you get the impression of a sucking inwards at the back of your throat. Long-term this negative pressure can cause permanent laryngeal



collapse and worsening breathing obstruction.

If your pet has problems breathing and is overweight then weight reduction could be helpful. We can advise on suitable weight reducing diets.

4. **Cataract Surgery**

Click here to get all the information regarding cataract surgeries performed in the UAE by the *Animal Eye Hospital - South Africa*, hosted by the British Veterinary Centre