

Total Hip Replacement

Total hip replacement (THR) is a salvage procedure (so-called because we are not repairing the natural joint but instead we are salvaging function by implanting a pain-free, fully functional artificial joint) used to treat painful or disabling hip lameness. Hip arthritis related to hip dysplasia is the most common reason that dogs will have a hip replacement. THR is a major orthopaedic surgical procedure but when performed by suitably qualified and experienced specialist veterinary surgeons using one of the contemporary hip replacement systems, the results are excellent. Following successful hip replacement surgery, a dog will be pain free and capable of unlimited exercise. Hip replacement surgery is “good enough” to see active working dogs (gun dogs, police dogs etc) return to full, unrestricted work.

System used

There are a number of canine THR systems on the market. Worldwide, the majority of experienced, specialist orthopaedic surgeons use either the “Kyon” cementless system (Switzerland) or the Biomedtrix Universal system (USA). Each of these systems has been used extensively and have been validated by numerous publications and reports in the veterinary scientific literature.

Numerous other systems are available, often marketed as cheaper alternatives to the two “market leaders” and though these have been used by some surgeons, they have not found favour amongst most specialists.

When

There is a widespread misconception that THR is only appropriate in old, crippled dogs. THR is a salvage procedure so it would be inappropriate in a dog whose hip discomfort or lameness can be COMPLETELY, SAFELY and PERMANENTLY controlled by less invasive methods for example medication, weight control or physiotherapy. If that is not possible (or if it is only possible using unacceptably long courses of medication) then THR should be considered. Similarly, if a dog’s exercise must be reduced, limited or restricted to avoid hip discomfort then THR should be considered. Bear in mind that successful THR will leave a dog completely pain free and fully athletically active for the rest of its life – modern canine THR systems will not “wear out” and can confidently be expected to outlast the rest of the dog!

With the advent of cementless THR systems and the improved results achievable by experienced specialist surgeons, many THRs are performed on dogs between 10 months and 2 years of age – in these patients (typically with arthritis related to hip dysplasia) the patient’s lameness has become apparent as has the fact that medical management provides incomplete control. Other dogs might have discomfort or lameness that is fully controllable but only with permanent medication – a situation that will not be sustainable for the life of the dog. In both cases, the patient might not look “that bad” but early THR offers complete pain control and a permanent return to full activity so the sooner the operation is performed, the more the patient will benefit.

Prognosis

The prognosis is generally excellent. THR offers the potential for pain free, normal hip function. Following successful THR surgery, a dog will be indistinguishable from a dog with normal hips (unless

the patient is X-rayed!). However, THR is major, technically difficult orthopaedic surgery and complications will occur from time to time. In the hands of the best surgeons, an excellent result will be seen following a single surgery in approximately 90% of patients. In the other 10% or so we will encounter complications and sometimes these can be very serious indeed. Of the 10% of cases that don't go well, about half can be successfully resolved following a second "revision" operation - "successfully resolved" means that the dog goes on to enjoy the same pain free athleticism that is achieved with uncomplicated surgery. Of the other patients (about 5% or one dog in twenty) repeated revision surgeries might be needed in pursuit of a good outcome. Regrettably, some cases can't be turned around and for those dogs the outcome is poor. Typically, it will be possible to remove all the implants and allow a scar tissue "joint" to form and while this saves the leg, pain control and function are far from normal. In the worst cases, amputation might become unavoidable but that is a very unlikely scenario.

It is very important to point out that THR is complex and technically difficult surgery – the estimates of prognosis given above are typical of experienced, fully qualified specialist orthopaedic surgeons who performing 25 or more THR procedures annually. Bear in mind that there is no "minimal qualification to do THR surgery and legally, absolutely any veterinary surgeon could attempt the operation!. Less well qualified surgeons, less experienced orthopaedic surgeons and surgeons doing fewer THR procedures will likely see very much higher complication rates.