



Joint Dysplasia and Osteoarthritis - Part 2



I hope you enjoyed part 1 of this series. In part 2, we will cover the management of joint dysplasia, and osteoarthritis.

I'm sorry that this will be the last article I write for Tuesday's Topic, as I am (very sadly!), leaving the practice on the 20th March 2020. Thank you very much for reading my articles, and for all your support, both with Tuesday's Topic and in the clinic.

Management of Joint Dysplasia (hip, elbow and shoulder)

How joint dysplasia is managed depends on the severity of the clinical signs, the type of dysplasia present, and the extent of secondary osteoarthritis (see below). There are two main approaches to managing joint dysplasia - 'conservative' (non-surgical), or 'surgical'. Conservative management includes physiotherapy, hydrotherapy, joint supplements, anti-inflammatory pain killers, exercise management and weight management. Surgical management includes an array of different surgery types as discussed below.

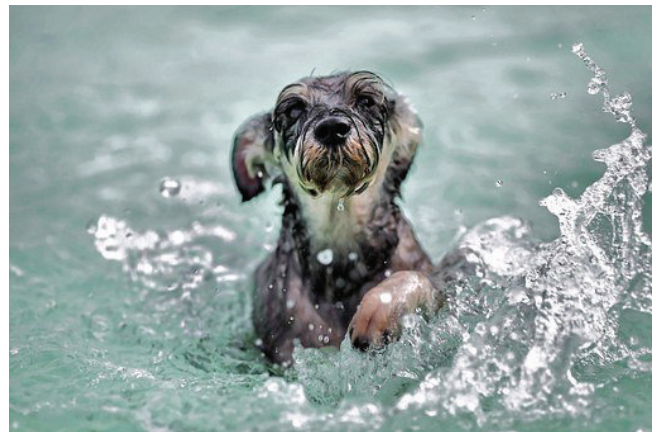
Conservative Management

If surgery is not appropriate, or not possible (eg. for financial reasons), joint dysplasia can be managed, to some degree, conservatively. Body weight is perhaps the most important factor in this, and making sure your pet stays lean can make all the difference.

Exercise management involves **short, gentle and frequent walks**, rather than long hikes, and reducing or stopping ball play, as this can be very detrimental. Physiotherapy and hydrotherapy are very helpful for keeping your pet active whilst avoiding impact or trauma to the joints, and for strengthening muscles, ligaments and tendons. However, it is essential you seek advice from qualified therapists.

Joint supplements (eg. YuMove Advance) are always recommended, but they can vary in quality, and some may have limited effect.

In the context of joint disease, anti-inflammatory pain killers means the non-steroidal anti-inflammatories (ie. the 'NSAIDs', or 'non-steroidals'). These are the equivalent, for dogs



and cats, of ibuprofen for humans. **Note, you MUST not use ibuprofen in any of its forms in dogs or cats.**

NSAIDs are usually very effective, but they are only used if weight management, exercise management and joint supplements are not sufficient for controlling the clinical signs. There are now a wide range of different forms/types available, and your pet may respond more to some than others. They can cause some short term side effects, especially vomiting and diarrhoea, and can be harmful to the kidneys long term. We always recommend regular blood tests if animals are put on long term NSAIDs. NSAIDs are also now available, which may carry fewer risks in the long term than the classical ones.

Some referral hospitals also offer stem cell therapy, or use of platelet rich plasma.

Surgical Management

Hip Dysplasia

There are a number of surgical approaches to hip dysplasia ranging from a total hip replacement (THR) to a femoral head and neck excision (FHNE). THR, where the hip joint is replaced with metal work, is the gold standard option for adult dogs, though it is extremely expensive. FHNE is most effective in small dogs and cats, and involves removing the ball of the hip joint, and leaving the surrounding muscles to support the joint (see image on the right). There are a number of other options, and which is most appropriate depends on the age of the animal, the size of the animal, and the severity of the disease. This can be discussed further with your vet and orthopaedic specialists.



Elbow Dysplasia

As explained in part 1, elbow dysplasia can take many forms, and many of these can be operated on using arthroscopy ('key hole' surgery). Surgery may simply involve removing a loose fragment of bone or cartilage from the elbow joint, but some cases may require more extensive surgery, including pinning or cutting the bone, or even the muscle supporting the elbow joint. Total elbow replacement is also now available in some referral hospitals, but this is a last resort procedure.

Shoulder Dysplasia

Surgical treatment of shoulder dysplasia involves removing the cartilage flap or 'joint mouse', and it is usually done using arthroscopy ('key hole' surgery). There are also now implants available but how these work is a little too complicated to cover here.

Osteoarthritis



Here, we compare the stifle (knee joint) of a healthy dog (left image) to a dog with stifle osteoarthritis (middle image). The image in the middle shows irregular new bone formation at multiple different locations, and fluid within the joint 'capsule'. Fluid within the joint 'capsule' is shown by increased 'greyness' of the image immediately in front of the two main bones that make up the stifle joint (compare with the image on the left). The image on the right shows osteoarthritis of an elbow joint.

Osteoarthritis is inflammation of the joint. It may develop secondarily to dysplasia, following previous trauma to the joint, following previous infection of the joint, or simply through wear and tear. Over time, the cartilage within the joint becomes damaged, and there is formation of new bone at the ends of the bones within the joint. This leads to swelling of the joint, pain, and a reduced range of motion. The signs of osteoarthritis are lameness, reluctance to exercise or jump, stiffness, particularly after resting, apparent lethargy or 'slowing down', and thickening of the joint. Unfortunately, all animals with joint dysplasia will develop secondary osteoarthritis, even if they have surgery, and osteoarthritis cannot be cured - it requires lifelong management.

The management of arthritis is the same as the conservative management of joint dysplasia - weight control, exercise control, joint supplements, hydrotherapy, physiotherapy and NSAIDs.

I hope you have enjoyed the second part of this series. If you have any questions about what has been covered on joint dysplasia and osteoarthritis, please do get in touch. Otherwise, thank you, and good bye from me and Tuesday's Topic.

