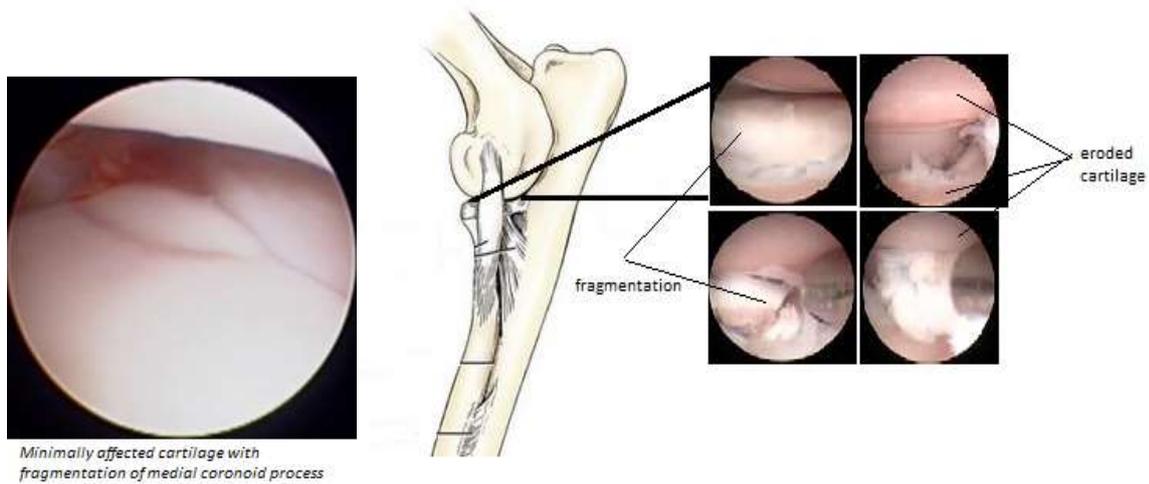


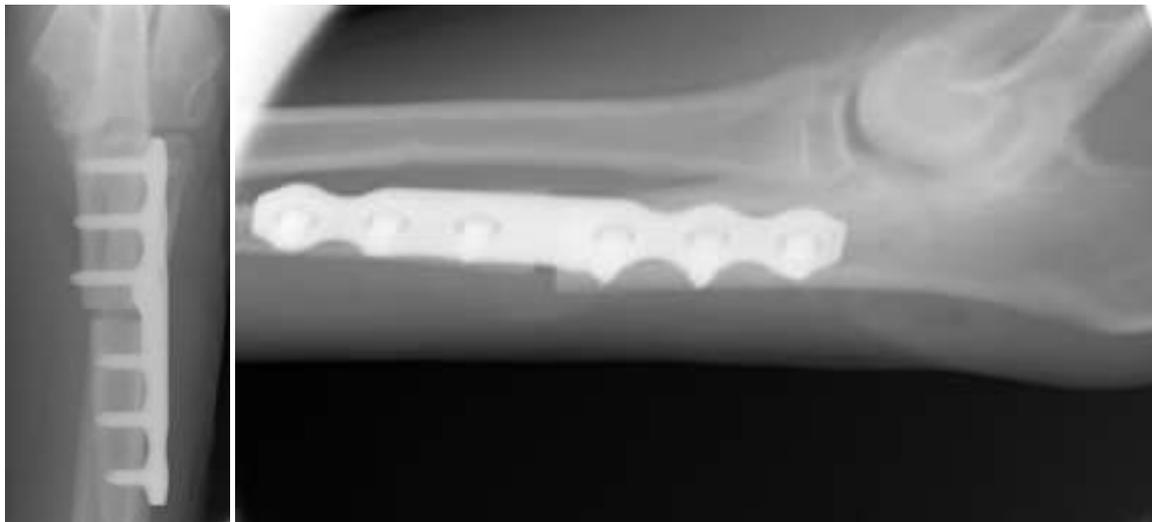
Proximal abducting ulna osteotomy (PAUL) procedure, to reduce the loading of the medial (inside) compartment of the elbow joint

This procedure is often done as a follow on procedure after arthroscopy, which we regularly perform to diagnose and treat medial coronoid disease in dog's elbows. The elbow joint is the articulation between three bones. The humerus bone is found proximally (above) the elbow; the ulna is found distally (below) and caudally (behind) the elbow; the radius is found distally and cranially (in front) of the elbow joint.



The elbow joint is typically initially assessed with arthroscopy (keyhole surgery). If fragmentation of the medial coronoid is confirmed, any fragments are removed leaving "clean" underlying bone. Cartilage of the ulna and on the medial (inside) part of the humeral condyle is assessed. The lateral (outside) compartment of the elbow joint (radial articular surface and lateral coronoid process) is also assessed.

Whether or not we then recommend a PAUL procedure depends on the severity of cartilage erosion.



Radiographs taken immediately after surgery

The PAUL procedure involves making an osteotomy (bone cut) in the ulna, and applying a specially designed plate to fix this bone, but in a subtly altered position. The PAUL procedure reduces some of the weight bearing on the ulna and shifts this to radius. In addition, the plate repositions the ulna with a slight tilt that reduces weight bearing on diseased cartilage and shifts this weight bearing to less affected areas. Decreasing friction

between diseased cartilages and reducing bone-to-bone contact (in cases with severe erosion) should reduce further damage and facilitate regeneration and repair of affected areas.

Because we cut the ulna, these procedures take several weeks of convalescence. Minor lameness often persists until 10 weeks post-operatively.

Typically, PAUL cases will have a dressing maintained for 3 weeks post-operatively, which need regular weekly changes. Exercise will be restricted for at least 6 weeks. Once we are satisfied that bone healing is progressing to plan, increased exercise can be allowed. A full post-op care sheet for PAUL procedures is available on our website

www.wm-referrals.com/wp-content/uploads/2011/03/post-op-PAUL-procedure-proximal-abducting-ulna.pdf

In all cases of elbow disease, some progression of degenerative joint disease is inevitable and this will likely require some medical treatment in the long term. An information sheet dealing with this is available on our web site.

www.wm-referrals.com/wp-content/uploads/2011/03/information-sheet-degenerative-joint-disease2.pdf

Laser treatment, stem cell therapy and platelet therapy are used with fair regularity for the management of elbow issues, and these can be used following arthroscopy and / or PAUL procedures.