

ELBOW DYSPLASIA

Prof R M Kirberger

Elbow dysplasia presents as fragmented medial coronoid process (FMCP), osteochondritis dissecans (OCD), ununited anconeal process (UAP) and joint incongruity. These conditions may be present as a single pathological process or as two or more conditions combined. The end result of this pathology is osteoarthritis which may be crippling and severely reduce quality of life as the dog gets older.

Elbow dysplasia is inherited as multifactorial polygenic traits, *i.e.* requires more than 1 gene to cause the phenotype to be expressed in an individual. A simple autosomal recessive mode of inheritance has been ruled out for the inheritance of OCD and FMCP and they appear to be inherited independently from each other as polygenic traits.

Elbow dysplasia is controlled internationally by national breed societies to limit the crippling effects of the disease by performing elbow certification performed by veterinary radiologist according to the guidelines of the International Elbow Working Group (IEWG). Radiographs are made by any veterinarian and are submitted to an official scrutineer of the SAVA - KUSA certification scheme.

Elbows are graded from 0 - 3 according to the degree of osteoarthritis and the visible presence of a primary lesions

Grade	Description
0	Normal elbow joint
1	Mild arthrosis
2	Moderate arthrosis or suspect primary lesion
3	Severe arthrosis or evident primary lesion

Dogs should preferably be bred with grade 0 - 0 elbows. Should a dam or sire have grade 0 - 1, 1 - 0 or 1 - 1 they should be bred with an opposite sex dog with grade 0 - 0. Dogs with one or both elbows having a grade 2 or 3 should not be used for breeding.

References:

- KUSA: <https://www.kusa.co.za/index.php/kusa-initiatives/sava-kusa-hd-ed-scheme>
- International Elbow Working Group <http://www.vet-iewg.org/>
- [Elbow dysplasia in the dog: pathophysiology, diagnosis and control: a review article.](#)
R.M Kirberger, S.L. Fourie. Journal of the South African Veterinary Association, Vol 69,2,a814,12July 1998.