

# Follicular Dysplasia

## Fact Sheet

### SYMPTOMS

- > Poor coat quality
- > Changes in coat colour
- > Poor or no hair
- > Regrowth following clipping
- > Progressive alopecia of varying severity
- > Primary hairs more commonly affected
- > Preferential retention of secondary hairs (undercoat)
- > Trunk most commonly and most noticeably affected
- > Face and distal extremities usually unaffected
- > Pattern of alopecia is grossly similar to endocrine alopecia and alopecia X

### TYPES OF FOLLICULAR DYSPLASIA

- > Colour dilution alopecia (CDA)
- > Most common in Dobermanns (fawn or blue)
- > Black hair follicle dysplasia (BHFD)
- > Occurs in piebald breeds
- > Only black hairs affected
- > Seasonal alopecia (cyclic follicular dysplasia)
- > Unlike other types, hair may regrow
- > Atrophic follicular dysplasia
- > Similar to human male pattern baldness

### A description of Breed Specific Follicular Dysplasia

**Changes tend to be less extensive or severe than for colour dilution/colour mutant alopecia.**

Black hair follicular dysplasia (BHFD) is a disorder confined to black coat regions affecting bicour or tricolour animals within the first few weeks of life. Lesions are characterised by dull, dry, lustreless hair, hair fracture, hypotrichosis and scaliness.

An autosomal recessive mode of inheritance has been determined for the Large Münsterländer. Histopathology is characterised by accumulation of melanin clumps within hair shafts, follicular lumina, root sheaths and hair bulbs. Hair shafts are irregular, bulging or replaced by keratinous debris.

BHFD and CDA are very similar with both sharing the same histological finding, what tends to separate both is that BHFD has an early onset. It is said that both represent different manifestations of the same disease

**The various types of canine follicular dysplasia are considered to be genetic.** As a result, they are considered to be largely incurable. Fortunately, most affected dogs are otherwise healthy, suffering only from their hair loss and possibly from some associated bacterial skin disorders or occasional sunburn. This is not a life-threatening disorder. Actually, it is largely a cosmetic condition and is much more of a distraction to owners than it is a real problem for the affected dog.

### ORIVET GENETIC PET CARE

Suite 102A/163-169 Inkerman Street  
St Kilda 3182 Australia

PO Box 110  
St Kilda 3182 VIC Australia

t +61 3 9534 1544 f +61 3 9525 3550

© Copyright 2014 Orivet

- > DNA Disease Screening
- > DNA Traits Testing
- > Canine Breed Identification
- > DNA Profiling and Parentage Confirmation
- > Personalised Genetic Health Wellness Plans
- > Genetic Pet Care Program for Veterinarians
- > All Natural Pet Care Products
- > Optimal Breed Selection



Personal Animal Genetics

[www.orivet.com.au](http://www.orivet.com.au)

  
Orivet  
Genetic Pet Care

# Follicular Dysplasia Fact Sheet

## **BLACK HAIR FOLLICULAR DYSPLASIA (BHFD)**

Affected Breeds Include – Cocker Spaniel, Basset Hound, Bearded Collie, Border Collie, Beagle, Dachshunds, Gordon Setter, Papillion, Pointer, Saluki, Schipperke, Dobermann (Show flanking and back alopecia), Husky and Malamute (hair loss over trunk), Airedale Terrier, Boxer, Bulldog, Staffordshire Terrier (appears in the saddle pattern, hair loss may not be permanent but can recur in a cyclical pattern), Portuguese Water Dog, Irish Water Spaniel, Curly Coat Retriever, Rottweiler, Curly Coat Retriever, English Springer Spaniel, Chesapeake Bay Retriever, German Shorthaired and Wirehaired Pointers.

Extensive alopecia develops in the affected dark-hair spots, while adjacent light-hair areas are normal. Darker hair areas often appear washed out, gray or bluish before hair is lost. The bold areas become dry and scaly. Secondary pyoderma is common in the bold areas. It has been speculated that BHFD and colour dilution alopecia are the same entity, as both share histological findings and because some dogs with BHFD are born with gray and white rather than black and white coats. The early age of onset in BHFD, however, differentiates the disease clinically. Black hair follicular dysplasia has been reported in the Basset Hound, Bearded Collie, Dachshund, Gordon Setter, bi-collared and tri-coloured crossbreeds, Jack Russell Terrier, Papillon, Pointer, Large Münsterländer, and Saluki. It has been suggested that in the Gordon Setter black hair follicular dysplasia might be an autoimmune disease.

Clinical diagnosis is not usually difficult as it is a visually striking disease. Puppies appear normal at birth, but by 1 month of age begin losing black hairs only, progressing until all of these hairs are lost by 8-9 months of age. Black haired areas of the head and neck are less severely affected. In black and red Doberman Pinschers, hair loss develops between 1 and 4 years of age, as in the Gordon Setter, and hair loss is dorsally distributed on the lower back. DNA test is available to identify carrier dogs that allows accurately identify normal, heterozygotes, and affected dogs.

## **BLACK and TAN SADDLE COAT**

Reference Dayna, L – Journal Of heredity Vol 102

Five breeds that exhibit the saddle tan (at/at) phenotype: Airedale Terrier, German Shepherd Dog, Beagle, Basset Hound, and Pembroke Welsh Corgi were included in the study.

Five breeds, Siberian Husky, Alaskan Malamute, Keeshond, Swedish Vallhund, and Norwegian Elkhound, were selected for the study because they were suspected of being fixed at a<sup>w</sup>/a<sup>w</sup>, the wolf sable pattern.

**Orivet Genetic Pet Care offers a genetic test for Black Hair Follicular Dysplasia (C-BHFD), Follicular Dysplasia Dilution Alopecia (C-FLDS) and Black & Tan Saddle Coat (C-BTSC)**

