

Acanthosis Nigricans (Blackening of the Skin) in Dogs

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Acanthosis nigricans is a condition in which there is abnormal darkening of the skin. It is primarily a disease of dogs and has several different forms and causes. The disease can be divided into a primary form that is a genetic condition found primarily in Dachshunds, and a secondary form that has several causes and can be found in any breed or age of dog. In the secondary form, there is a mobilization of the pigment called 'melanin' to areas of chronic inflammation. It is the melanin that creates the dark appearance of the skin.

Primary acanthosis nigricans

The primary form of the disease occurs in dogs less than one year of age. In this form the skin darkens and thickens, seborrhea develops, and secondary infections with bacteria or yeast can occur. It can affect large areas of the body.

Primary acanthosis nigricans is not treatable, but the condition can be controlled with steroids, melatonin injections, and frequent anti-seborrheic shampoos. This condition is rare and is diagnosed mainly through breed history and biopsy.

Secondary acanthosis nigricans

The secondary form of the disease is much more common. The darkening of the skin occurs because of one of three underlying conditions. 1) Friction caused by [obesity](#) or conformational abnormalities. 2) Endocrine imbalances including [hypothyroidism](#), [Cushing's disease](#), or sex hormone imbalances. 3) [Hypersensitivities](#) due to [food](#), [inhalant \(atopy\)](#), or [contact allergies](#).

In addition to blackening of the skin, secondary acanthosis nigricans is often associated with chronic hair loss and/or itching and other skin problems. If an owner sees these skin conditions developing, she should have the dog examined by a veterinarian and the underlying cause of the condition should be identified.

The treatment for secondary acanthosis nigricans usually consists of treating the underlying condition, e.g., through weight loss, thyroid medication or allergy relief. In more severe cases, steroid therapy at low doses has helped to reduce inflammation in the skin. In addition, Vitamin E supplementation has shown to help in the recovery of some cases. The majority of time the condition will improve once the underlying condition has been identified and properly treated.