

# Autoimmune Diseases In Horses

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Autoimmunity, the production of antibodies directed against the body's own tissues, isn't particularly well studied in horses, but there are some conditions where it's known, or suspected, to be involved (the standard treatment for autoimmune diseases is corticosteroids):

- **Anemia or Thrombocytopenia:** Destruction of red blood cells or platelets can occur when antibodies to these cells become bound to their surface, targeting them for removal. This can occur secondary to other conditions such as malignancy (lymphosarcoma), viral infection (e.g. EIA), severe bacterial infection or a drug reaction (antibiotics, NSAIDs). Unexplained cases, presumed to be a primary autoimmune disease, have also been found.

- **Equine Recurrent Uveitis, aka Moonblindness, Periodic Ophthalmia:** Although the debate rages on regarding whether horses with ERU have active low-level infections, usually with *Leptospira*, several studies have confirmed the presence of antibodies to ocular tissues in ERU.

- **Pemphigus:** This is an autoimmune disease of the skin characterized by crusts, scaling, hair loss and blisters of the coronary band or mouth.

- **Canker:** This is a disease of the frogs and sometimes other tissues of the feet, characterized by extensive tissue destruction, and growth of abnormal tissues. Most cases are believed to be caused by infections, but there is a case report in the literature of a Haflinger gelding with negative cultures that responded to steroid therapy and was suspected to have an autoimmune cause.

- **Alopecia areata:** This is a disease that causes baldness, either in discrete spots or bodywide. It is caused by autoantibodies directed against hair follicles.

- **Arthritis:** Although autoimmune arthritis (rheumatoid) is well recognized in other species, the significance for the horse isn't clear. Several studies have confirmed the presence of rheumatoid factor and other antibodies in the synovial fluid from diseased joints of horses but also found them to some extent with fractures or joint trauma, and blood levels weren't elevated.