## Recurrent Pemphigus Foliaceus in Horse: A Case Report

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## **Abstract**

An 8-year-old crossbred thoroughbred chestnut stallion was suspected to an autoimmune mediated skin disease based on history, clinical observations, microbiological and clinicopathologically findings. The clinical signs disappeared completely after five weeks of treatment with PO prednisolone. However, approximately eight months later, the lesions recurred in a more severe form. There was no improvement despite the repeating previous treatment by horse's owner; therefore, oral azathioprine was added to prednisolone after skin biopsy. A significant therapeutic effect was observed by this combination, however; the use of azathioprine was discontinued after fifteen days due to diarrhea, while prednisolone continued for another week. After improvement of the symptoms, oral prednisolone was also stopped with a decreasing trend. Vesiculobullous to pustular lesions with acantholytic characteristic of the stratum corneum and stratum granulosum of epidermis were the histopathological findings, characteristics of pemphigus foliaceus. This is the first reported case of recurrent pemphigus foliaceus in Iran.

**Key words**: Autoimmune, Histopathology, Relapse, Skin, Type II Hypersensitivity

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## **Refrences**

- Felippe, M. J. B. (2016). Equine Clinical Immunology (1st ed). Oxford, UK: John Wiley and Sons.
- Maxie, M. G. (2015). *Jubb, Kennedy & Palmer's pathology of domestic animals (6<sup>th</sup> ed), volume 1.* St. Louis, Missouri: Elsevier Health Sciences, Saunders.
- Olivry, T., & Chan, L. S. (2001). Autoimmune blistering dermatoses in domestic animals. *Clinics in Dermatology*, 19(6), 750-760.
- Petersen, A. D., & Schott, H. C. (2005). Cutaneous markers of disorders affecting adult horses. *Clinical Techniques in Equine Practice*, 4(4), 324-338.
- Rosenkrantz, W. (2013). Immune-mediated dermatoses. Veterinary Clinics: Equine Practice, 29(3), 607-613.
- Scott, D. W., & Miller, W. H. (2010). *Equine Dermatology* (2<sup>nd</sup> ed). Maryland Heights, Missouri: Elsevier Health Sciences, Saunders.
- Smith, B. (2015). Large Animal Internal Medicine (5th ed). Portland, Oregon: Mosby publishing.
- Tizard, I. R (2017). Veterinary Immunology (10th ed). St. Louis, Missouri: Elsevier Health Sciences, Saunders.