

Summary

Author: Sayyed Jafar Hasani

The skin, as the largest organ and protective layer of the human and animal body against physical, chemical, and infectious damages, is significant. The presence of sensory receptors in the skin facilitates the detection of pain, itching, touch, heat, cold, etc., and also indicates internal body disorders. Skin and mucosal disorders in pets, especially dogs and cats, constitute a considerable part of clinical encounters in veterinary medicine. These varied conditions can significantly impact animal welfare and lead to discomfort, pain, and potentially jeopardize their overall quality of life. Various factors play a role in the severity of skin diseases, such as age, breed, skin color, gender, diet, geographical region, season, etc. Various factors such as bacteria, parasites, fungi, viruses, immune system disorders, endocrine system disorders, cancers, certain toxins and drugs, trauma, deficiency of certain vitamins and minerals can also cause multiple skin lesions and disorders. The aim of this study was to determine the prevalence and histopathological examination of biopsy samples from skin-mucosal disorders in dogs and cats referred to the specialized veterinary hospital of Urmia University. In total, more than 640 dogs and cats were examined in this study for the prevalence of skin-mucosal lesions in dogs and cats. In total, 83 dogs and cats with skin-mucosal lesions were identified. The animals studied in this research were divided into three groups based on age (less than 1 year, 1 to 3 years, and over 3 years). Also, the animals studied were categorized based on age, breed, and gender. In this study, various biopsy and clinical methods were used to diagnose skin-mucosal lesions. The identified skin-mucosal lesions included 57 cases (68.67%) of traumatic wounds, then 8 cases (9.63%) of skin lesions caused by scabies, and 8 cases of fungal skin-mucosal lesions (9.63%), 5 cases of bacterial and viral skin-mucosal lesions (6.02%), 3 cases (3.61%) of skin-mucosal lesions related to immune system disorders, 2 cases (2.40%) of neoplastic skin-mucosal lesions. Among the rare cases identified, one can mention a case of bullous pemphigoid in a cat, a case of demodex in a cat, a case of SCC tonsillar in a dog, a case of toxic epidermal necrosis in a dog, and a case of sebaceous gland adenitis in a dog. Bullous pemphigoid and skin infestation with demodex in cats were reported for the first time in Iran in this study. In the present study, DSH breed cats (71.05%) and then Persian breed (23.68%) and mixed breed dogs (31.11%) and then Iraqi breed (24.44%) had the highest prevalence of skin-mucosal lesions among different breeds of dogs and cats. The prevalence of skin-mucosal diseases in male dogs and cats was 64.44% and 65.78%, respectively, and more than female dogs and cats. Of the 83 cases with identified skin-mucosal lesions, 45 dogs (54.21%) (29 male dogs and 16 female dogs) and 38 cats (45.78%) (25 male cats and 13 female cats) were identified. Also, the prevalence of skin-mucosal lesions in dogs less than 1 year old and cats less than 3 years old was 40% and 89%, respectively, and more than other ages. Understanding the histopathological details and statistical bases of these skin-mucosal lesions for accurate diagnosis, effective treatment, and ultimately improving the clinical outcomes of animals is vital. The present research is the first comprehensive histopathological study of skin-mucosal diseases in dogs and cats in Iran.

Keywords: Skin, mucus, scabies, fungus, immunity, cancer, dog, cat, pathology.