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Letter to the Editor

Sino-nasal Aspergillosis in a Dog (Bir Köpekte Sino-nazal Aspergilloz)

Sevim KASAP [1] Hakan SALCI [2] Özge YILMAZ [3] Zeki YILMAZ [1]

[1] Department of Internal Medicine, Faculty of Veterinary Medicine, Uludag University, TR-165059 Bursa - TURKEY
[2] Department of Surgery, Faculty of Veterinary Medicine, Uludag University, TR-165059 Bursa - TURKEY
[3] Department of Microbiology, Faculty of Veterinary Medicine, Uludag University, TR-165059 Bursa - TURKEY

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Dear Editor,

We would like to report an interesting case of sino-nasal aspergillosis in a dog with the rhinoscopic results.

Chronic nasal discharge is a common clinical sign of respiratory tract disease in dogs [1]. It is resulted from fungal infection, neoplasia, foreign body or some oral disease [2,3]. Fungal infections of the nasal cavity are relatively uncommon in dogs [3-6]. In a study evaluated 80 dogs with nasal disease [6], the reported rates of the diagnosis include non-specific rhinitis (23.7%), neoplasia (15%), fungal infection (nasal aspergillus) (8.7%), cleft palate (8.7%), periodontal disease (4%), parasites (1.3%), foreign body (1.3%), primary bacterial disease (1.3%) and idiopathic (36%). In practice, most of the clinician at the first step of diagnostic work-up on nasal discharge in dogs with aspegillosis has been focusing on bacterial etiology, thereby resulting in increasing disease severity and time-consuming effects of antibacterial administrations and its unfavorable results. As most of the available diagnostic tests have limitations, a combination of tests is often necessary to confirm a diagnosis [4,5]. Thus, the aim of this case was to highlight the importance of rhinoscopic examination and fungal culture to diagnose of sino-nasal aspergillosis in a dog with chronic nasal discharge.

A dog (5 years old, Setter, male) was referred to Small Animal Clinic (Faculty of Veterinary Medicine, Uludag University, Bursa) with an anamnesis of chronic intermittent muco-hemorrhagic discharge from the right nasal passage *(Fig. 1)*. Also, dog was un-responsive to empirical antibiotic use (Enrofloxacin, 5 mg/kg, SC, once a day, for 5 days; Baytril®, Bayer, Italy) by a private vet. Clinically, sneezing and snoring were observed. Routine hematological (HM5, automatic blood analyzer, Abaxis) and biochemistry panels (Comprehensive profile, VetScan, Abaxis) were within reference ranges (data not shown). Rhinoscopic examination was applied to evaluate the nasal cavity and to help the exact diagnosis.

General anesthesia was acquired with 10 mg/kg/i.m., ketamine HCl (Alfamine®, Egevet, Turkey) injection after 2 mg/kg/i.m., xylazine HCl (Alfazyn®, Egevet, Turkey) sedation. The dog was laid down sternoabdominal and rhinoscopic examination was performed using 2.7 mm diameter rigid telescope and additional equipment (Karl Storz®, Germany). During examination, cold lactate ringer solution was insufflated locally to provide the clear endoscopic view and to prevent the mucosal hemorrhage from the inflammative spots on mucosal layer. Lesion was determined over the right ostium nose *(Fig. 1)*. Rhinoscopy revealed local hemorrhagic spots, congestion, mucosal polyp-like structures and erosions in the nasal cavity,

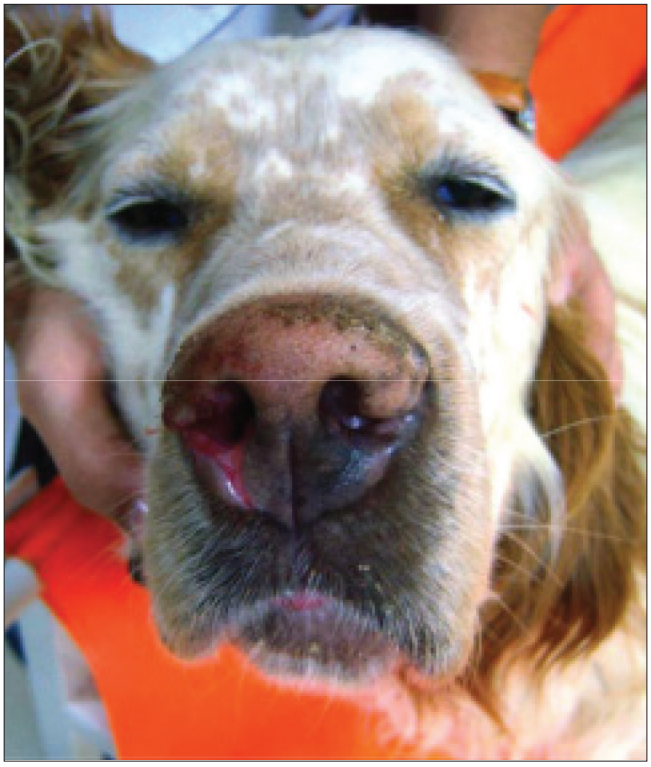

Fig 1. Lesion over the right ostium nose due to nasal discharge

Şekil 1. Sağ ostium nazi çevresinde nasal akıntı nedenli şekillenmiş lezyon

İletişim (Correspondence)
+90 224 2940804
zyilmaz@uludag.edu.tr

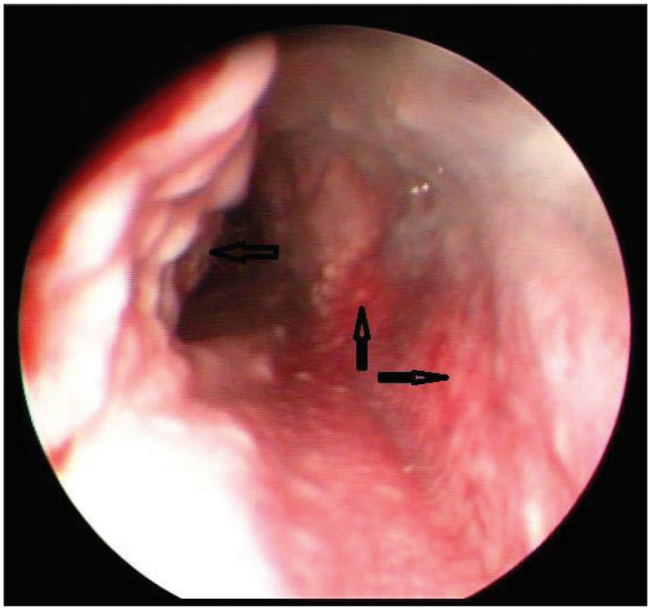

Fig 2. Congestion and mucosal protrusions *(arrows)* on nasal mucosa
Şekil 2. Nazal mukozadaki konjesyon ve mukozal çıkıntılar *(oklar)*

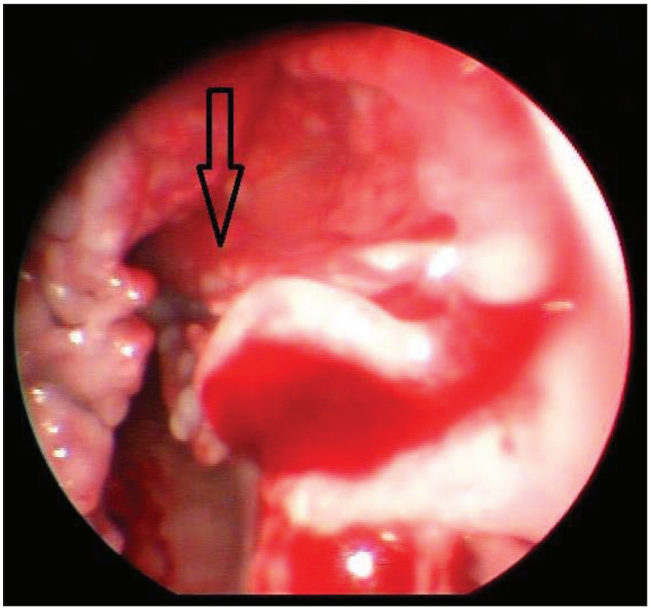

Fig 3. Hemorrhage and polyp-like proliferations on concha mucosa *(arrow)*
Şekil 3. Konha mukozasında kanama ve polip benzeri üremeler *(ok)*

particularly in the conchal part *(Fig. 2)*. Nasal sample was collected for microbiologic culture, and then the rhinoscopy of left nasal cavity was completed, which was clear from the pathology and considered as normal. Nasal sample was cultured with SDA, and incubated with 25°C for a week. Microbiological examination revealed the *Aspergillus spp*. Thus, sino-nasal aspergillosis was diagnosed, and then treated with oral antifungal agent, Ketocanozole 10 mg/kg (Ketoral tablet, Bilim Ltd, Turkey). Fourteen days later, therapy resulted with full recovery, based on the clinical and rhinoscopic examinations.

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