

Clinical Report

**An Unusual Case of Subglossal Hirudiniasis
in an Iranian Cross-breed Goat-kid**

**Ali Asghar Mozaffari^{*1}, DVSc
Parham Razavi Ebrahimi²
Masoud Imani³, DVM**

¹*Department of Clinical Studies, School of Veterinary Medicine,
Shahid Bahonar University of Kerman, Kerman, Iran*

²*Veterinary student, School of Veterinary Medicine,
Shahid Bahonar University of Kerman, Kerman, Iran*

³*Resident of Animal Obstetrics and reproduction diseases,
Faculty of Veterinary Medicine, Ferdowsi University of Mashhad, Mashhad, Iran*

Abstract

Case Description- Hirudiniasis in the subglossal area is very rare. We describe an Iranian cross-breed goat-kid with two leeches' infestation in his sublingual area.

Clinical Findings -The animal was referred to the veterinary clinic with a history of anorexia, teeth grinding and bleeding from the mouth. In clinical examination of the mouth, two leeches observed which attached to sublingual region.

Treatment and Outcome - Manual removal by forceps was done and all clinical signs were subsided.

Clinical Relevance-Most leeches are bloodsucking parasites which attach themselves to vertebrate hosts, bite through the skin and suck out a quantity of blood. Other than the nuisance effect of their biting, their medical significance is generally minimal

Key words: Hirudiniasis, goat, leeches, subglossal area

Case Description

An Iranian cross-breed goat-kid (3-months-old) was referred to veterinary clinic with a history of anorexia, teeth grinding and bleeding from the mouth. The animal was kept under traditional condition.

*** Corresponding author:**

Ali Asghar Mozaffari, DVSc
Department of Clinical Sciences, Faculty of Veterinary Medicine,
Shahid Bahonar University of Kerman, Kerman, Iran.
E-mail address: aliasghar_mozaffari@uk.ac.ir

Other related clinical signs were unthriftiness, tachycardia, and pale mucosal membranes. The respiratory rate and temperature were normal. Hematological examination confirmed anemia (PCV=15%, Hb=6mg/dl, RBC=7×10⁶/μl, WBC=10000/μl). In clinical examination of the mouth, two leeches observed which attached to sublingual region (fig 1). The leeches were enlarge and fixed, without any moves. They stuck to the tongue by their oral sucker at their anterior end.



Figure 1. Two leeches attached to sublingual region in a goat-kid.

Treatment, Outcome and Discussion

Manual removal by forceps was done (fig.2, 3) and all clinical signs were subsided. Most leeches are bloodsucking parasites which attach themselves to vertebrate hosts, bite through the skin and suck out a quantity of blood. Other than the nuisance effect of their biting, their medical significance is generally minimal.⁴ Leeches are segmented worms that belong to the phylum annelida and comprise the subclass hirudinea.¹ The majority of leeches live in fresh water environments, while some species can be found in terrestrial.² Most leeches are hematophagus as they are predominately blood suckers that feed on blood from vertebrate and invertebrate animals.³ Some leeches attach internally when people drink contaminated water, infesting the upper digestive or respiratory tract. Horse Leeches may attach inside the pharynx or nasal cavity of horses. The internal leech, *limnatus nilotica*, is found in southern Europe, northern Africa and western Asia and may attach to the mucous membranes of the pharynx, nasopharynx and esophagus.⁴ There is an anticoagulant that originally derived from leeches, it is called hirudin. Hirudin is a specific inhibitor of thrombin that is independent of anti-thrombin activity. Nowadays leeches are widely used in medicine and even hirudin is available as a recombinant compound and could be useful in treatment of hypercoagulable states in which there is a diminished thrombin activity.⁵ Leech bites of the skin are common. Other common sites of leech bites are the nose, pharynx, larynx, esophagus, rectum, bladder, urethra and vagina.⁶⁻²³

Subglossal Hirudiniasis were not reported yet and we describe an unusual case of subglossal Hirudiniasis in an Iranian cross-breed goat-kid for the first time.



Figure 2. Manual removal of leeches by forceps.



Figure 3. Two leeches, after removal by forceps.

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آلودگی غیر معمول به زالو در یک راس بزغاله نژاد آمیخته ایرانی

علی اصغر مظفری^۱، پرهام رضوی ابراهیمی^۲، مسعود ایمانی^۳

^۱ گروه علوم درمانگاهی، دانشکده دامپزشکی دانشگاه شهید باهنر کرمان، کرمان، ایران
^۲ دانشجوی دامپزشکی، دانشکده دامپزشکی دانشگاه شهید باهنر کرمان، کرمان، ایران
^۳ دستیار تخصصی مامایی و بیماریهای تولیدمثل، دانشکده دامپزشکی، دانشگاه فردوسی مشهد، مشهد، ایران

توصیف بیمار - آلودگی به زالو در ناحیه زیر زبانی یک یافته بسیار نادر است. در این مورد یک مورد آلودگی به زالو در ناحیه زیر زبانی یک راس بزغاله نژاد آمیخته ایرانی توصیف می گردد.

یافته های بالینی - یک راس بزغاله با تاریخچه بی اشتها، دندان قروچه و خونریزی از دهان به کلینیک ارجاع گردید. در معاینه بالینی دهان دو زالو در ناحیه زیر زبان مشاهده گردید.

درمان و نتیجه آن - بعد از جدا کردن زالوها توسط پنس، تمام علائم بالینی به تدریج فروکش کرد.

کاربرد بالینی - بیشتر زالوها انگل های خونخوار هستند که خودشان را به میزبان مهره دار متصل کرده و با آسیب به پوست مقدار زیادی خون می مکند. بجز رنجش ناشی از حضور انگل اهمیت بهداشتی آنها معمولاً ناچیز است.

کلید واژگان - زالو، بز، زیر زبان، هیروندینیاژیس

