Clinical Report

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

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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.

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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.](image)

**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. Leeches are segmented worms that belong to the phylum annelida and comprise the subclass hirudinea. The majority of leeches live in fresh water environments, while some species can be found in terrestrial. Most leeches are hematophagus as they are predominately blood suckers that feed on blood from vertebrate and invertebrate animals. 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. 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. Leech bites of the skin are common. Other common sites of leech bites are the nose, pharynx, larynx, esophagus, rectum, bladder, urethra and vagina. 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 leaches by forceps.

Figure 3. Two leeches, after removal by forceps.

References

چکیده

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

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توصیف بیماری - آلودگی به زالو در ناحیه زیر زبانی یک پایه بسیار نادر است. در این مورد یک مورد آلودگی به زالو در ناحیه زیر زبانی یک راس بزغاله نژاد آمیخته ایرانی توصیف می‌گردد.

نافته های بالینی - یک راس بزغاله با تاریخچه بی‌شایعی، 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 جدایی زالوها توسط پنس، تمام علائم بالینی به تدریج فروکش کرد.

کاربرد بالینی - بیشتر زالوها اگلب های خونریز هستند که خودشان را به مزیای مهره دار متصل کرده و با آسیب به پوست مقدار زیادی خون می‌کشند. بجز رنجش ناشی از حضور اگل تهمات بهداشتی آنها معمولاً ناجی است.

کلید واژگان - زالو، یک راس بز، بیماری‌شناسی