



## Soft tissue infection and delayed wound healing due to neglected animal bite: A case report

### İhmal edilmiş hayvan ısırıklarına bağlı yara iyileşmesi gecikmesi ve yumuşak doku enfeksiyonu: Bir olgu sunumu

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#### Abstract

One of the reasons of skin and soft tissue infections are infections due to animal bites. People who live in places where wild animals are found or travelers visiting these places are more likely under the risk of animal bites. These people should be careful about animal biting and after exposure should take appropriate treatment and use regularly. Interruption of treatment and poor wound cause to soft tissue infections. We aim to present this soft tissue infections due to animal bites for those who are living in areas where the wild animal population is and that could create risk for travelers to those area. In this case, we presented a seven years old child with a monkey bite and his delayed wound recovery due to insufficient public health conditions.

**Keywords:** Animal bite; emergency; public health; soft tissue infections; wound healing.

Skin and soft tissue infections in the pediatric age group is quite common and it is a condition that causes the application to outpatient polyclinic and emergency services.<sup>[1]</sup> This very common condition serve clinical finding with the spread of infection along skin folds and lymphatics after deterioration of skin integrity.<sup>[2]</sup> Infections due to animal injuries, which can be a cause of skin and soft tissue infections, is an important public health problem in the world.<sup>[3]</sup> It can be seen due to the deterioration of the integrity of the skin result from bite. It is most frequently seen with dogs, less frequently with cats, humans, snakes, scorpions, centipedes, horses, sea animals (such as dogfish, piranha), monkeys, and bees.<sup>[3,4]</sup> As a result of deterioration in the integrity of the skin, various harmful agents can spread to the body. A 7-year-old boy was brought to our emergency department by his relatives complaining of

#### Özet

Deri ve yumuşak doku enfeksiyonlarının bir nedeni de hayvan ısırıkları sonucu olan enfeksiyonlardır. Yabani hayvanların yaşadığı bölgede yaşayan veya bu bölgeye ziyaret edenler hayvanlar tarafından ısırılma riski altındadır. Bu kişiler hayvan ısırığına karşı dikkatli olmalı, maruziyet sonrası gerekli tedaviyi almalı ve düzenli kullanmalıdırlar. Biz; yabani hayvan popülasyonunun olduğu bölgede yaşayan ve bu bölgeye ziyarete gidenler için risk oluşturabilecek hayvan ısırığına bağlı yara yeri enfeksiyonlarını sunmayı amaçladık. Bu vakamızda yedi yaşındaki bir çocuğun maymun ısırığı sonrası yetersiz halk sağlığı koşullarından dolayı gecikmiş yara yeri iyileşmesini sunduk.

**Anahtar Sözcükler:** Hayvan ısırığı; acil; halk sağlığı; yumuşak doku enfeksiyonları; yara iyileşmesi.

edema at the wound site and continuous bleeding due to biting by the monkey. It was learned that the patient was taken to many centers and then brought to our side. In this case; we will present a case of soft tissue infection which is the result of not being able to perform well in wound care.

#### Case Report

A 7-year-old boy was brought to our emergency room with a complaint of redness and swelling on his left ankle. It was learned that he was bitten by a monkey over his left ankle 7 days ago. It was stated that the patient had applied to several different health care providers before coming to our hospital and the tetanus vaccination was performed where the patient first applied and the antibiotic was started but not regularly



used. After 2 days, due to bleeding he went to the pharmacy where Vitamin K was injected and the patient was discharged after dressing with compression. The patient was sutured again at another health center due to on continuing bleeding in the next day. When the patient come to us, when we looked at the wound site of the patient, we observed that it was sutured and there were edema and heat increase.

By starting animal bite treatment, rabies vaccine is administered to the patient because it was learned that vaccination was not done before. Ceftriaxone (Unacefin) 1000 mg, metronidazole (Flagyl) and paracetamol (Parol) 10 ml/kg were given. According to blood tests of the patient; WBC: 9.17, HGB: 8.0, PLT: 96270. INR of 1.96, other coagulation kidney and liver function tests were found to be normal. HBV, HCV and HIV were negative. The patient was consulted with pediatrics and plastic surgery. Afterwards, he was discharged for daily dressing and follow-up.

## Discussion

Animal bites are some important public health problems in children and adults around the world.<sup>[3,5]</sup> The effects of animal bites depend on the type and size of the animal species and health condition of the bitten person and also the availability of appropriate health care.<sup>[6]</sup> Many animal species have the potential to bite human beings; however, the most important ones are the snakes, the dogs, the cats and the monkeys. Although dog or cat bites frequently seen in Turkey, bites with apes and other predators can be seen at Africa with more miscellaneous wildlife areas.<sup>[7]</sup>

Monkey bites makes %2–3 of all animal bite injuries.<sup>[3,5,8]</sup> Monkey bites pose a significant risk among travelers and are the second most animal bite risk for travelers after dog bites. Factors that are transmitted to humans by animals are called zoonoses. Most of these diseases are spread because of exposures to animal spitting or nasal secretions after the bite. Also it can be transmitted by the faeces of animals such as monkeys. These other infections transmitted from animals include tuberculosis, HAV, HBV, amebiasis, tetanus, human herpes B virus, rabies.<sup>[4]</sup> Treatment depends on the health condition of the patient, Sort of animal and presence of rabies. The basic principle for the care of animal bites is: early medical intervention including wound cleanup is required. Although our patient was sutured in the health center he applied, because of the disability of the patient's dressing and the use of antibiotics he should use, he applied to the health center many times and wound healing was delayed. In order to us this delay should be caused due to inadequate health services and insufficient wound care rather than child's age.

Treatment should be initiated with prophylactic antibiotics for reducing the risk of infection and evaluated with the vaccine status of the animal for the rabies risk. Tetanus vaccination should also be performed if the person is not vaccinated sufficiently.<sup>[9,10]</sup> Despite the initiation of tetanus vaccination and prophylactic antibiotics in our clinic, rabies prophylaxis could not be initiated because there is no anti-rabies in the health center due to insufficient public health conditions in the region. Communities and travelers should be informed about monkey bites and protection techniques. Health personnel should be trained in the proper management of these injuries. Health authorities and government officials should provide rabies control in animal populations and appropriate wound care, rabies treatment and antibiotic prophylaxis for biting people.<sup>[10,11]</sup>

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