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Beware of non-ulceroglandular tularaemia cases in your area

Dear Sirs,

We read with interest the article entitled 'Tularaemia presenting as a parapharyngeal abscess: case presentation' by Koç *et al.* in *The Journal of Laryngology & Otology* May 2012 issue.[1] This article is of value not only to ENT specialists but also to clinicians in a range of other specialties, including infectious disease and general practice.

Although tularaemia was identified almost 100 years ago in North America, we believe there are still problems with its correct diagnosis even in endemic regions and countries. The existence of at least six different clinical forms of tularaemia (i.e. ulceroglandular, oculoglandular, glandular, pulmonary, gastrointestinal and oropharyngeal) may confuse the diagnosis. The clinical manifestations of tularaemia are varied and depend primarily upon the route of infection. In general (but with some exceptions), most patients are admitted due to regional lymphadenopathy developing after skin inoculation by the bacteria, and may or may not have a detectable cutaneous inoculation lesion (as in the ulceroglandular and glandular forms). It is more difficult to diagnose the other, rarer forms, that is: the oculoglandular form (developing after conjunctival inoculation), the oropharyngeal form (following contamination by the oral route), the pneumonic form (following inhalation of infected aerosols or as a consequence of bacteraemia) and the typhoidal form (a severe, systemic infection which may be fatal). Quick and accurate diagnosis is further complicated by the non-availability of relevant tests in all but a few centres.

However, the most important factor impeding correct tularaemia diagnosis is failure to consider this condition as a possible infectious disease. This delays diagnosis and increases the risk of complications such as suppurative lymphadenitis. For example, in Turkey, although a few tularaemia epidemics were recognised in 1927, there were no reported cases of tularaemia between 1945 and 1988.[2] However, in 1988, following the report of 205 tularaemia cases in the previous 10 years in the city of Bursa and surrounds, tularaemia was recognised as an epidemic infectious disease, at least in that region.[3] Several other Turkish reports were subsequently published, prompting renewed interest in this rare infectious disease.[4–6] These reports not only prompted the inclusion of tularaemia in the differential diagnosis of relevant cases, but also established the oropharyngeal form as the most predominant form of the disease in Turkey. This contrasted with the description of the disease included in classical medical textbooks. The tularaemia cases reported in North America and Europe were mostly ulceroglandular in form, caused by contact with hunted animals (e.g. rabbits, hare and deer), dead wood, tick bites, etc. However, in some rural areas where the consumption of unchlorinated water (e.g. natural spring water and well water) is common, the oropharyngeal form of the disease predominates.[4,7] As mentioned by Koç *et al.*, this form may be summarised as tonsillopharyngitis not responding to penicillin, with subsequent cervical lymphadenitis. Presentations such as parapharyngeal abscess are rarely seen or reported.[1,8]

We would like to congratulate and thank Koç *et al.* for reminding us of the importance of the oropharyngeal form of tularaemia presenting with parapharyngeal abscess.

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