Otolaryngologic manifestations of the ongoing outbreak of human monkeypox: ENT specialists should be on the alert

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Dear Editor,

Human monkeypox (HMPX) is caused by an orthopoxvirus having a wide range of hosts and a reservoir in wild animals and infrequently affecting humans. It was first identified in captive monkeys in 1958, and in a child from Congo in 1970 [1]. HMPX is now endemic in Congo Basin and West Africa. Both animal to human, through handling or ingesting wild animals, and human to human transmission, through close contact with infected individuals or via fomites, have been described. In the classic clinical presentation, after an incubation of about 12 days, HMPX has a prodromal phase of fever, malaise, lymph node enlargement, and headache followed by skin eruptions 2–4 days later [2].

Since May 2022, an unprecedented HMPX outbreak has spread rapidly outside the African endemic areas involving more than 50 countries across the 5 WHO regions [3]. From the start of this outbreak to August 1st 2022, 12,186 confirmed cases have been reported from 27 European countries with Spain and Germany accounting for the about 57% of all cases [4]. On July 23, the WHO Director-General declared the escalating global monkeypox outbreak a public health emergency of international concern [5].

Recently, three large cases series collecting altogether 910 subjects (99.9% males) who tested positive for HMPX infection between April 27 and July 11, 2022, were published. These studies consistently describe a new and atypical clinical presentation of HMPX as compared to previously documented reports from endemic regions [6–8] and confirm initial observations that the ongoing outbreak involved, in almost all of cases sexually active gay or bisexual males (98.7%) with high-risk sexual behaviors harboring a concomitant HIV infection in up to 42% of cases. In the vast majority of cases, the transmission was suspected to be autochthonously acquired through sexual activity [8]. Although the predominant symptoms included multiple skin lesions in the probable area of inoculation (mainly anogenital region), fever, and lymphadenopathy, mucosal lesions were observed up to 40% of cases [8]. More than 1/3 patients developed systemic symptoms after the onset of mucocutaneous lesions [7] and up to 14% of patients presented with mucocutaneous lesions without systemic symptoms [7]. Moreover, mucocutaneous involvement manifested as a single lesion in 10% of cases [6–8]. As these features may mimic other sexually transmitted infections (STI), they were less likely to be promptly recognized as HMPX [6]. A further element of misunderstanding can be determined by a concomitant presence of an STI which has been observed in up to 29% of cases [8].

Of interest, oral and oropharyngeal manifestations were frequently reported in these studies. Beyond skin lesions involving the perioral area, nose and the lips, pharyngitis was observed in up to 21% of cases [8]. Moreover, in 9% of subjects, the oropharynx was the only site of mucosal lesions and in 5% of all cases oropharyngeal symptoms, including pharyngitis, odynophagia, epiglottis, and oral or tonsillar lesions, were the initial symptoms of HMPX infection [8]. Tonsillar erythema, pustules, oedema, and tonsillar ulcers which could mimic other STI, such as syphilis and gonorrhea and easily lead to misdiagnosis were also described [7, 8].

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Although the disease had a self-limiting course in all cases with no deaths being reported and a similar severity among subjects with or without HIV infection, 94 cases (10.3%) required hospitalization [6–8]. In 9 patients, this was determined by upper aero-digestive tract symptoms: one case of tonsillar ulceration and surrounding soft tissue cellulitis leading to dysphagia and affecting the airway[6], one case of epiglottitis [8], and two cases of tonsillar abscess [7]. In addition, 5 patients required hospitalization due to pharyngitis limiting oral intake [8].

The peculiar and novel clinical manifestations of the current HMPX outbreak that include oral- and oropharyngeal lesions which could be mistaken for bacterial tonsillitis or misinterpreted with other STIs should alert otolaryngologists which could be both decisive in the diagnostic process, limiting the spread of the disease, and consulted for the treatment of complications. All at-risk persons presenting with oral- and oropharyngeal symptoms suggestive for STI, should be also tested for HMPX infection by throat swab. Finally, ENT specialists should also be aware of the possible risk of occupational contagion and they should be offered HMPX vaccination.

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