### OTOLARYNGOLOGY



### Letter to the Editor

\*Corresponding author Arpit Saxena, MS (ENT) Department of ENT Uttar Pradesh University of Medical Sciences Saifai, Etawah UP 206130, India Tel. +91 9532306179 E-mail: arpitsaxenaexam@gmail.com

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# Chronic Otitis Media with Facial Palsy: An Unexpected Etiology

Arpit Saxena, MS (ENT)<sup>1\*</sup>; Dharmendra Kumar Singh, MS (ENT)<sup>2</sup>; Vivek Raj Sinha, MS (ENT)<sup>2</sup>

<sup>1</sup>Department of ENT, Uttar Pradesh University of Medical Sciences, Saifai, Etawah, UP, India <sup>2</sup>Department of ENT, Command Hospital (Central Command), Lucknow, UP, India

Chronic otitis media is a commonly observed disease worldwide. Facial palsy in a patient can be attributed to many causes. Facial paresis with chronic otitis media is almost always attributable to facial palsy. This article reports the clinical condition of a patient in whom the etiology of facial paresis was not conventional. However, the unexpected etiology that was observed could not be located in any pre-existing literature related to facial paresis.

A 13-year-old female, student by occupation presented with a medical history of severe right sided otalgia for 6 days and facial asymmetry for 4 days. Only 6 months earlier, she had discharge from her right ear. There was no history of skin rashes over the ear or face or facial asymmetry. Otological examination indicated an edematous external auditory canal, moderate central perforation in the tympanic membrane with granulation tissue in the antero-superior quadrant. Right sided lower motor neuron facial palsy was classified as House-Brackmann grade IV. The tuning fork test demonstrated right side conductive deafness in the affected patient. Routine hematological and biochemical parameters which were analyzed indicated normal values of measurement. Her chest X-ray report was normal and she tested negative for human immunodeficiency virus (HIV). Contrast enhanced computed tomography (CT) scan showed soft tissue density in the middle ear and the mastoid air cells. On the basis of the clinical and radiological findings, it was earlier diagnosed as otitis media induced facial paresis. Thus, tympanomastoid exploration was accordingly planned. After the surgery was being performed, the granulation tissue was seen filling the middle ear. While performing cortical mastoidectomy, a dead red ant (solenopsis) was observed in the middle ear, which was carefully removed (Figure 1). The granulation tissue over the promontory and the horizontal portion of the facial nerve was removed. The ear ossicles were intact and underlay tympanoplasty was the implemented procedure. Post-operatively she received dose of oral steroids, which was tapered in 3 weeks and her facial palsy resolved completely within 4 months.

> Figure 1: Operating microscope photograph of right ear after raising tympanomeatal flap.



Handle of malleus
Red ant in middle ear

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Pradhan et al<sup>1</sup> demonstrates that foreign bodies may lead to facial paresis. Zamzil et al<sup>2</sup> have reported facial palsy due to the presence of an intraural tick. In the present case, the red ant possibly entered through the pre-existing perforation in the tympanic membrane and inoculated its venom into the middle ear. The presence of the toxin and the dead ant in the middle ear probably led to the formation of the granulation tissue. Facial paresis may have thus been due to the effect of the venom that would have entered the fallopian canal by natural dehiscence. Therefore, the discussed case of the young female having chronic otitis media with facial paresis due to the presence of an insect in the middle ear cleft helps to expand the horizon of unusual etiology of facial paresis.

### CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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