Mastoiditis secondary to mycobacterium abscessus imaged with gallium-67 scintigraphy

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ABSTRACT

Atypical mycobacterium is rarely seen as a cause of chronic mastoiditis but has been increasingly recognized over the past few years. Mycobacterium abscessus is the most pathogenic and chemotherapy-resistant, rapid-growing mycobacterium of all the four groups. This paper presents a case of a 57-year-old woman who had chronic mastoiditis with recurrent exacerbations. The initial computed tomography (CT) findings showed the presence of an inflammatory process and she was treated with the appropriate antibiotics. The patient subsequently underwent a tissue biopsy when she presented with another exacerbation. At this time, the CT scan did not identify the ongoing exacerbation, but the Gallium-67 scintigraphy did. © 2008 Biomedical Imaging and Intervention Journal. All rights reserved.

Keywords: Mastoiditis; Mycobacterium abscessus; gallium-67 scintigraphy

INTRODUCTION

Atypical mycobacterium is a rare entity implicated in de novo mastoiditis. There are very few reported cases especially in the South-East Asian region. Various strains of atypical mycobacterium have been known to cause disease in human beings, since their isolation in the 1920s. Of the four groups of atypical mycobacterium, the group IV rapid growers (Mycobacterium abscessus and Mycobacterium fortuitum) are the ones which are recognized as human pathogens [1].

This paper presents a case of a 57-year-old woman who had chronic recurring mastoiditis and discusses the computed tomography (CT) findings and the use of the Gallium-67 scintigraphy in this condition.

CASE REPORT

A 57-year-old woman, presented to the ENT clinic with gradual loss of hearing and bilateral ear discharge. She also noticed that pieces of bone were extruding from her left ear. She had been suffering from chronic bilateral ear discharge since her early teenage years. The physical examination done by the otorhinolaryngologist had shown some ear discharge, but there was no evidence of abscess formation, nor was there any facial nerve palsy noted. A presumptive diagnosis of bilateral chronic suppurative otitis media was made. Her blood investigations were essentially normal apart from the normocytic normochromic anemia. Ear swabs from the external auditory canal were sent for microbiological

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