

Isolation of Mycobacterium Chelonae in the Sputum of Patient with Metastatic Breast Cancer

Zaker Bostanabad S¹, Salehian P^{*2}, Ghalami M³, Pourazar Dizaji S³

¹department of Microbiology ,Faculty of science ,Islamic Azad University ,parand branch

²Department of Pathology ,Massoud Laboratory

³ Department of Mycobacteriology ,Massoud Laboratory

Abstract

Aim and Background. Mycobacterium chelonae is non-tuberculous mycobacteria (NTM), a grouping that encompasses all mycobacteria outside of the Mycobacterium tuberculosis complex. M. chelonae causes various clinical syndromes, including lung disease, local cutaneous disease, osteomyelitis, joint infections, and ocular disease. With the exception of lung disease, these syndromes commonly may be seen after trauma. Mycobacterium chelonae is a rare cause of isolated lymphadenitis. Endocarditis has also been documented. Disseminated skin and soft tissue disorders & almost exclusively in the setting of immuno-suppression, especially AIDS. Esophageal disorders increase the risk for pulmonary disease due to rapidly growing mycobacteria. Surgical-wound infections due to Mycobacterium chelonae are well documented, especially in association with cardiothoracic surgery and augmentation mammoplasty. Alternative practices such as mesotherapy have been associated with skin infections. No human-to-human transmission has been documented.

Materials and Methods. Sputum was collected from suspected non-tuberculosis patient case had proven registration of clinical diagnostic examination. This isolate was cultured on Lowenstein Jensen solid medium and grown colonies after 7 days. All identification testing and drug susceptibility testing was done accordance CDC standard method. PCR amplification with several primers for identifying complex tuberculosis from Chelonae was performed.

Results. Acid fast staining, uramin and culture tests has been positive. Tuberculin, PCR amplifications has been negative. Growth on 2- thiophene carboxylic acid medium was positive in Lowenstein Jensen and colonies of bacteria was non- photochromogen. Catalase test in two temperatures has been positive and niacin-nitrate tests was identified negative.

Conclusions. In this study, this isolates was from mycobacterium chelonae complex that has been isolated from patient with metastatic breast cancer and virulence of Mycobacterium chelonae is in the human with other problem consist of cancer, autoimmune, Allergy, osteomyelitis and etc

Key words. Mycobacterium Chelonae, Metastatic Breast Cancer

***Corresponding Author:**

Address: department of Pathology, Massoud Laboratory, Tehran, Iran

Email: Piroozsalehian@yahoo .com