P043

BATTERIOLOGIA

CORYNEBACTERIUM SPP.: A MULTIRESISTANT ANTIBIOTIC MICROORGANISM IN ONCOLOGIC PATIENTS.

A. Minopoli [1], F. Labonia [1], S. Liotti [1], M. Bruno [1], P. Forte [1], R. Calemma [1]

[1]*Laboratory Medicine Unit, Istituto Nazionale Tumori "Fondazione G. Pascale" - IRCCS, Napoli, Italy*

INTRODUZIONE

Corynebacterium species, frequently considered as contaminants in clinical samples, have become recognized more often as pathogens, particularly among immunocompromised patients. Moreover it has recently been reported multidrug resistance pattern of the isolates. We investigate the antimicrobial susceptibility profiles of invasive Corynebacteria, isolated from oncologic patients admitted to the National Cancer Institute "Fondazione Pascale".

METODI

During a 36 months period (January 2016 to December 2018) n° 56 cases of Corynebacteria were isolated and identified by VITEK® 2 Compact automated system (Biomérieux).
E-test strips methods in cation-adjusted Mueller-Hinton agar with 5% sheep blood was set for Antimicrobial susceptibility profiles. The MIC of Benzilpenicillin (PGL–0.002-32 µg/mL), Gentamicin (GM–0.016-256 µg/mL), Vancomycin (VA–0.016-256 µg/mL), Clindamycin (CM–0.016-256 µg/mL), Linezolid (LZ–0.016-256 µg/mL), Rifampicin (RI–0.002-32 µg/mL), Tetracycline (TC–0.016-256 µg/mL) and Ciprofloxacin (CIP–0.002-32 mg/L) was interpreted according to EUCAST breakpoints guidelines.

RISULTATI

Corynebacteria (n=56) were isolated from the following sites or biological samples: swabs (n = 40), blood cultures (n = 5), abdominal wall (n = 1), drainage (n = 5), pleural fluid (n = 1), abdomen fluid (n = 2), drainage tip (n = 2). Of the 56 Corynebacteria, 10 (17.8%) were isolated in 2016, 17 (30.3%) in 2017 and 29 (51.7%) in 2018.
PGL resistance Corynebacteria were 70% in 2016, 82.3% in 2017, 85.7% in 2018.
CIP resistance Corynebacteria were 50% in 2016, 76.4% in 2017, 80.9% in 2018.
CM resistance Corynebacteria were 50% in 2016, 64.7% in 2017, 80.9% in 2018.
GM resistance Corynebacteria were 10% in 2016, 11.7% in 2017, 14.2% in 2018.
LZ resistance Corynebacteria were 20% in 2016, 11.7% in 2017, 4.7% in 2018.
RI resistance Corynebacteria were 20% in 2016, 64.7% in 2017, 61.9% in 2018.
TC resistance Corynebacteria were 50% in 2016, 52.9% in 2017, 28.5% in 2018.
VA resistance Corynebacteria were 0% in 2016, 5.8% in 2017, 14.2% in 2018.

CONCLUSIONI

Our results show PGL, CIP, CM, RI and VA resistance increase without statistical significance and with an average incidence increase of 0,19%. The increased Corynebacteria resistance is probably enhanced by the selective pressure occurring in the hospital setting and can have consequences, especially in immunocompromised patients.