

CATHETER-RELATED SEPSIS CAUSED BY RARE PATHOGEN - TSUKAMURELLA PAUROMETABOLA

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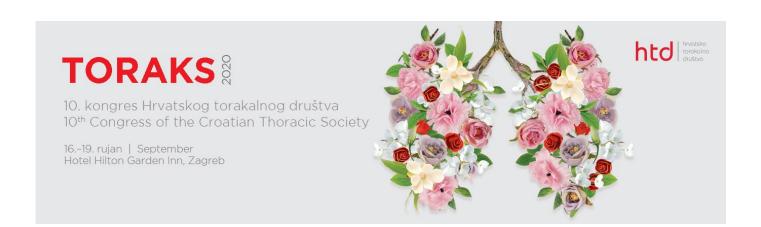
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Zavod za respiracijsku insuficijenciju, bolesti plućne cirkulacije i transplantaciju pluća

Objective:

INTRODUCTION: *Tsukamurella spp.* are gram-positive opportunistic bacteria that are mostly spread sporadically in humans, through intravenous catheter or other clinical instruments (e.g. pacemaker). They can cause various symptoms, but predominantly are connected with pulmonary and cutaneous infections.

CASE REPORT: 18-year old patient who was diagnosed with pelvic Ewing's sarcoma in 2014 and has undergone surgery and chemotherapy the same year. At that time port-a-cath was implanted so



chemotherapy could be administered through a central vein. In 2015 she had PBSCT and in 2016 radiation therapy of the pelvis. Despite of all efforts, in 2017 there were signs of disease progression in lungs. Metastasectomy was performed, whereupon chemotherapy and radiotherapy were applied.

From December 2018 until March 2019 patient had unexplained pyrexia (up to 40°C) which was accompanied by fatigue and dull chest pain. At admission CT scan showed newly formed bilateral consolidations, dominantly in upper lobes, as well as a large number of semisolid lesions in both lungs. Bronchoscopy with bronchoalveolar lavage was performed and microbiological testing isolated Streproccocus viridans and Providencia Stuartii ESBL. There were no sufficient cytological findings that would indicate malignant etiology of these lesions. However, even with administering antibiotics according to the antibiogram, patient was not recovering and symptoms have prolonged. Before and during therapy inflammatory markers were not significantly increased (CRP 22,4 mg/L with normal leukocyte count). At that point samples for blood culture were taken which subsequently isolated and identified Tsukamurella paurometabola in addition to Staphylococcus aureus. Since the first pathogen is mainly connected with intravascular catheters, port was removed without further ado and vancomycin was added to initial antimicrobial treatment which was then replaced by linezolid because of minor allergic reaction. The patient responded well to the treatment and was discharged asymptomatic and in a good condition with peroral antibiotics; she took linezolid for 2 weeks and ciprofloxacin for 4 weeks in total. Two months after discharge control CT scan showed substantial regression of bilateral inflammatory lesions along with five lesions that are in all probability metastatic. Thus, she continued with the oncology treatment.

CONCLUSION: While taking care of immunocompromised patients we have to bare in our minds that rather uncommon pathogens can be the cause of infections. The main problems with successfully fighting these microbes are misdiagnosing due to the lack of experience in addition to limited data available about pathogenic mechanisms and antimicrobial susceptibility so further investigations are needed.

TORAKS §

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