P2291 Panton-Valentine leukocidin-positive Staphylococcus aureus infections: descriptive analysis of the diagnosed cases in a Portuguese hospital

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Background: Panton-Valentine leukocidin-positive Staphylococcus aureus (PVL+ S. aureus) infections are known to cause relapsing multifocal skin and soft tissue infections (SSTI), necrotizing pneumonia and pediatric cases of severe osteomyelitis. Its potential contagiousness allows the agent to spread, even in the presence of an adequate treatment, in the absence of decolonization.

Materials/methods: Retrospective analysis of all cases of PVL+ S. aureus infections present in Molecular Biology Lab database until October/2018.

Results: We found 19 patients with PVL+ S. aureus infection, 17 adults and 2 children (median 37 years-old), 7 female and 12 male patients. Most of the cases (17) were primary cases, but we found 5 secondary disease cases (only 2 of them tested for the presence of the agent and included in the study). 11 patients had a recent traveling history (8 to Africa, 2 to Asia and 1 to the USA). The most common presentation was SSTI (16), but we found 2 cases of necrotizing pneumonia and a pediatric case of severe osteomyelitis. Hospital admission was needed in 6 cases, 4 of them to an intensive care unit. Besides these last 4 cases, only 3 other patients had the diagnosis in the first event of the disease; in all the remaining 12 cases, recurrent episodes of SSTI occurred before the identification of the PVL gene. From the first presentation of the disease to the detection of PVL+ S. aureus there was a time range of 3 days to 5 years. During this period, 9 patients needed at least 2 antibiotic treatments and 5 needed invasive drainage procedures. After decolonization, only 2 patients relapsed, both of them with secondary familiar cases who were not decolonized at the same time of the index case.

Conclusions: Severity and impact of PVL+ S. aureus infections are clear, even in a small case series as ours. Therefore, and bearing in mind that we don’t properly know their epidemiology and associated risk factors, it is essential to have a high suspicion index and to look for the presence of PVL gene, so that every necessary measure for an efficient treatment can be adopted.