

POSTER PRESENTATION

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P207: A cluster of panton- and valentin- producing *Staphylococcus aureus* infection at a departmental hospital in Benin: possible association with consumption of contaminated food

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Introduction

A three-month period in 2005, two distinct types of methicillin-sensitive *Staphylococcus aureus* (one producing of Pantone-Valentine leukocidin (PVL) and the other not) were isolated from bronchial specimens of paediatric inpatient unit at the Zou/Collines Departmental Hospital (CHDZ/C), who had been previously cared for by the nurses. The source of outbreak was probably a faulty contamination of specific food consumed by patients.

Objectives

We aim to determine the source of particular *S. aureus* strains and possible relationships with hospital environment.

Methods

An investigation was conducted that involved screening of all inpatients receiving a specific food, hospital environment sampling and the follow-up of cases until the end of hospital stay. Isolates were identified, tested for antimicrobial susceptibility and analysed for PVL, LukE/LukD, and enterotoxin A production. Pulse Field Gel Electrophoresis (PFGE) was performed to establish the clonality of the strains.

Results

A total of 36 infected inpatients with *S. aureus* were identified. Twenty-eight cases of pneumonia were discovered and PVL-producing *S. aureus* concerned 61%.

By PFGE an indistinguishable PVL-producing *S. aureus* was identified in the food served, 28 patients, the key-board and faucet handles in their respective room. Enhanced hygiene measures, particular hand hygiene, terminated the outbreak.

Conclusion

Our finding suggest an associated between environmental contamination and patient infection, not limited to the patients' rooms. Transmission of PVL-producing *S. aureus* can be prevented in the hospital by a combination of decontamination of the environment, and the promotion of hand hygiene.

Disclosure of interest

None declared.

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