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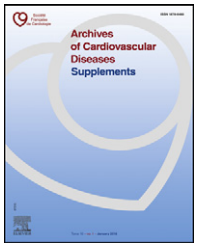

Posters commentés

Vendredi 13 septembre de 9h à 9h45

PC 1

Impact of skin and nasal decontamination before cardiac surgery on postoperative Staphylococcus infection rate in children

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Abstract

Background Postoperative infections occur in about 10% of pediatric cardiac surgeries, involving Staphylococcus aureus in most of the cases. Nasal decontamination of Staphylococcus aureus with mupirocin has been reported to reduce postoperative Staphylococcus aureus infections after cardiac surgery in adults, but the effect of preoperative decontamination in children undergoing cardiac surgery has not been enough studied to determine a consensus.

Aims We tried to evaluate the impact of systematic preoperative decolonization with intra nasal mupirocin application and chlorhexidine soap skin washing, on postoperative Staphylococcus infection in children undergoing cardiac surgery.

Methods We conducted a monocentric retrospective study including children from 7days-old to 18 years-old undergoing cardiac surgery. Our population was divided in three groups according to decolonization protocol (group N: no decolonization, group T: targeted decolonization in Staphylococcus aureus carriers only, and group S: systematic decolonization).

Results Three hundred and ninety three children were included between October 2011 and August 2015(122 in group N, 148 in group T and 123 in group S). Staphylococcus infection rate significantly decreased in group S compared to group N (0.8% vs. 7.7%; $P < 0.05$) and tended to decrease in group S compared to group T (0.8% vs. 4.7%; $P = 0.06$). Systematic decontamination also significantly reduced the rate of infections starting from the skin (including surgical site infections and bloodstream infections), but had no effect on the rate of pulmonary infections. The lack of decontamination was associated with a higher risk of postoperative Staphylococcus infection (15% vs. 41%, $P < 0.05$).

Conclusion Our study suggests that systematic preoperative skin and nasal decontamination decrease postoperative SI in children undergoing cardiac surgery.

Keywords Staphylococcus; Postoperative infection; Cardiac surgery; Antibiotic prophylaxis; Mediastinitis; Children; Congenital heart disease

Disclosure of interest The authors declare that they have no competing interest.

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PC 2

Oxygen uptake efficiency slope in children with congenital heart disease versus healthy children

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Abstract

Background Cardio-pulmonary exercise test (CPET) provides accurate evaluation of physical capacity and disease severity in children with congenital heart disease (CHD). However, in clinical practice, full participation to obtain optimal measure of VO2max may be difficult. As an alternative, the oxygen uptake efficiency slope (OUES) is a reproducible and reliable parameter measured