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## NASAL COLONIZATION WITH STAPHYLOCOCCUS AUREUS IN CHILDREN AND ADOLESCENTS WITH TYPE 1 DIABETES

M.E. Rogalidou<sup>1</sup>, D.S. Mamoulakis<sup>1</sup>, S. Maraki<sup>2</sup>, E. Galanakis<sup>1</sup>

<sup>1</sup>Department of Paediatrics <sup>2</sup>Laboratory of Clinical Bacteriology-Parasitology-Zoonoses and Geographical Medicine, University Hospital of Heraklion, Crete, Greece <u>rogalidu@yahoo.com</u>

Introduction: Individuals with diabetes present with an increased sensitivity to staphylococcal infections. The nasal colonization with S. aureus in children with type 1diabetes was investigated and compared with members of their family and with healthy children.

Methods: The population consisted of 3 groups: 50 children and adolescents (aged 3.5 to 25.5 years) with type 1 diabetes; 32 parents and siblings of these diabetic children; and 27 healthy children examined at the Department of Accidents and Emergencies for usual paediatric conditions and without recent hospital admission. The culture of the nasal swab, the identification of S. aureus and the resistance to antibiotics were performed according to the NCCLS guidelines.

Results: The children with diabetes had increased frequency (p=0.049) of nasal colonization with S.aureus compared with both their family members and their non diabetic peers (relative risks 2.56, 95% CI 0.783-8.37 and 2.16, 95% CI 0.667-7.0, respectively). Table 1Conclusion: Nasal colonization with S. aureus is frequent in children with type 1 diabetes. A remarkably high proportion of methicillin resistant strains was observed. The clinical importance of these findings remains uncertain and further investigation is required.

|                            | Diabetic children<br>N=50 | Family members<br>N=32 | Control group<br>N=27 |
|----------------------------|---------------------------|------------------------|-----------------------|
| Nasal colonization with S. | 12 (24%)                  | 3 (9%)                 | 3 (11%)               |
| aureus                     |                           |                        |                       |
| Methicillin resistance     | 7/12 (58%)                | 2/3 (66%)              | 1/3 (33%)             |
|                            | Table 1                   |                        |                       |