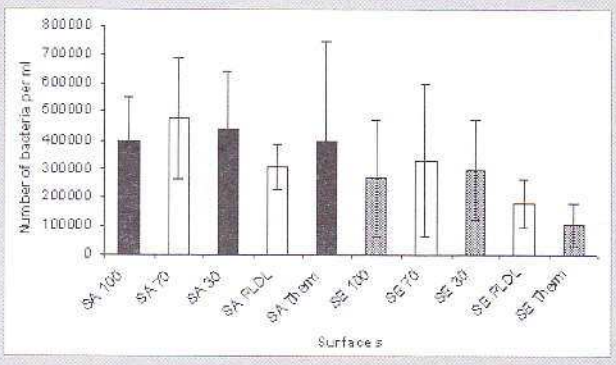

FIG. 3. Graph showing flow cytometry results from SA (*S. aureus*), and SE (*S. epidermidis*) adhering to different polyurethanes.

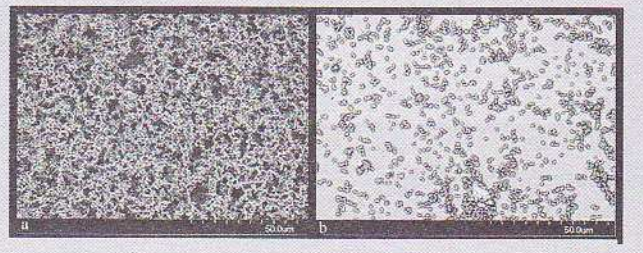

FIG. 4. SEM images of a) *S. aureus* and b) *S. epidermidis* adhering to 70% polyurethane.

ous surfaces. The example shown in FIGURE 3 confirmed SEM observations (FIG.4), that more *S. aureus* adhered to the surfaces than *S. epidermidis*.

Discussion and conclusions

These results show that different methods can be used to study the adhesion of bacteria to biomaterials in vitro. SEM is useful for morphology and general observations, and depending on the material (polymers tend to auto-fluoresce), either fluorescence microscopy or flow cytometry can be used to quantify the amount of adherent bacteria.

Acknowledgements

Thanks to Dr Kati Gorna (ARI, Davos), Dr John Disegi (Synthes USA), Dr Lukas Eschbach (RMS, Bettlach, CH), and Dr Samuele Tosatti (ETH Zurich, CH) for the surfaces.

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THE RADIOIMMUNO-ASSAY OF CORTISOLE LEVEL IN MIXED SALIVA FROM THE PATIENTS WITH MULTIPLE DENTAL CARIES

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[Engineering of Biomaterials, 37, (2004), 5]

Caries is known to be accompanied by the metabolism impairment in a human organism. These changes involve the oral liquid medium, which is mixed saliva. A great number of articles are devoted to the protective role of the oral fluid, its participation in oral metabolism. However little attention is paid to the study of cortisole level in mixed saliva from patients with different degrees of caries.

The aim

of presented article was to study of cortisole level in mixed saliva from patients with different degrees of caries.

Materials and methods

For this purpose we have studied 3 groups of patients from 15 to 25 years of age. The samples of saliva for research were collected in the morning time, before breakfast in disposable sterile tubes.
Before testing, samples were stored in liquid nitrogen at temperature - 196°C. The hormone levelsin oral fluid was determined by using cortisole marked with Iodine 125 (Steron-C-125 I) in the detector of Gamma-camera measuring the speed of sedimentation in each sample in 1minute. After that we determined the cortisole level in nMol/l.

Results

Analysis of the results of our research shows that there are considerable differences in concentration of cortisole in saliva from people with low and high intensity of caries ($p < 0,01$) and low and middle intensity of the process ($p < 0,05$). Differences between middle and high caries intensity groups weren't reliable ($p < 0,05$).

Conclusion

On the basis of our research we can say that change of cortisole level in mixed saliva reflects growth of cariesogenic situation in the oral cavity. Consequently, this test can be used for diagnostic purposes and for determination of the effectiveness of treatment and preventive measures.