Sickle cell disease and dental treatment

Précis: This paper offers an overview of sickle cell disease, focusing on management and practical implications for dental practitioners. Although the authors are primarily concerned with the management of paediatric patients, this article applies to all age groups.

Abstract: Sickle cell disease (SCD) and sickle cell trait (SCT) are found most frequently in individuals of African, Middle Eastern and Indian ethnicity. Population migration has made this disease more common worldwide, including Ireland. We present an overview of this disease, focusing on management and practical implications for dental practitioners.

Key words: dentistry, sickle cell disease, HbSS, anaesthesia

Andrea Piccin, Department of Haematology, Our Lady’s Children’s Hospital, and Irish Blood Transfusion Service

Pádraig Fleming
Dublin Dental School & Hospital, and Dental Department, Our Lady’s Children’s Hospital

Elva Eakins
Irish Blood Transfusion Service

Eleanor McGovern
Dental Department, Our Lady’s Children’s Hospital

Owen P Smith
Department of Haematology, Our Lady’s Children’s Hospital

Corrina McMahon
Department of Haematology, Our Lady’s Children’s Hospital

Correspondence:
Dr Andrea Piccin,
Irish Blood Transfusion Service,
James’s St,
Dublin 8.
Tel: (087) 237 6525
Email: andrea.piccin@ibts.ie
Prevalence and risk factors associated with denture-related stomatitis in healthy subjects attending a dental teaching hospital in North Jordan

Abstract: There is scant information regarding the prevalence of denture-related stomatitis (DRS) in Jordan.

Aims: The aims of this study were to investigate the prevalence of DRS in a group of healthy Jordanian subjects wearing removable complete dentures, and to investigate for the factors that may be associated with this infection.

Materials and methods: A total of 300 complete denture patients attending a dental teaching centre in North Jordan for replacement dentures were examined thoroughly for the presence of DRS. Demographic data, including denture-wearing habits, duration of denture usage and smoking, were also obtained. Oral mucosal tissues were examined for signs of denture trauma. Dentures were assessed for plaque accumulation.

Results: Of the 300 subjects examined, 175 were male and 125 were female. The overall prevalence of DRS in males and females was 52% (157/300). Increased plaque deposits (plaque indices 2 and 3) were significantly more prevalent in subjects with severe forms of DRS (p<0.01). Dentures that were more than 20 years old were located in the group of subjects with grade 2 and 3 infections. A total of 86% of patients with DRS complained of denture trauma compared to 10% of subjects with healthy mucosa, and 87% of the DRS group wore dentures continuously day and night. A total of 70% of subjects with grade 3 DRS were heavy smokers (more than 15 cigarettes/day).

Conclusion: Local factors studied contributed significantly to the development of DRS in healthy subjects and are important factors to be considered in the pathogenesis of this infection.
Orthodontic evolution: an update for the general dental practitioner.
Part 1: recent advances, treatment need and demand, and benefits of treatment

Abstract: Like all specialties of dentistry, orthodontics has undergone considerable development and improvement in treatment techniques over the past four decades. The two articles in this series aim to inform the general dental practitioner about these developments, together with an update on orthodontics’ relationship to dental health, TMJ dysfunction and other aspects.

Key words: orthodontics, treatment developments, treatment need and demand, epidemiology, treatment outcomes