391 Do patients with sickle-cell anaemia (HbSS) experience more oral and maxillofacial pain and altered facial sensation than patients with haemoglobin SC (HbSC) disease

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Introduction: Sickle-cell disease (SCD) is characterised by episodes of acute self-limiting pain due to vaso-occlusion. Around two-thirds of SCD patients are HbSS homozygotes whilst most of the remainder have HbSC disease. The HbSC phenotype is typically milder and patients experience fewer pain episodes. Whilst oral and maxillofacial pain and altered facial sensation have been reported in SCD, no genotype-specific data has been published.

Methods: 208 SCD patients were surveyed via post, telephone or face-to-face interview on oral and maxillofacial sequelae of sickle-cell crises. Patients that did not have HbSS or HbSC SCD were excluded from the study.

Results: 179 patients met the inclusion criteria; 101 had HbSS disease and 78 HbSC. 66% of HbSS patients experienced sickle bone pain once a month or more, compared to 49% of HbSC patients (P < 0.05 Chi-Square). 40% of HbSS sufferers had experienced painful crises associated with the jaw and/or face, compared to 24% of HbSC patients (P < 0.05 Chi-Squared). 36% of HbSS patients had experienced altered facial sensation compared to 8% of HbSC patients (P < 0.05 Chi Square).

Conclusion: These data further delineate the HbSS and HbSC phenotypes. Altered facial sensation, and sickle crises associated with oral and maxillofacial pain are more common in patients with HbSS-SCD than HbSC-SCD. The most common trigger for SCD patients to access medical services is due to painful crises; Medical and Dental professionals must be aware of the potential involvement of the face and jaw, especially in HbSS patients.

Conflict of interest: None declared.


392 Oral and maxillofacial sequelae of sickle cell crises in a rare sickle cell disease genotype – HbS/β*-thalassemia

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Introduction: Haemoglobin sickle-beta thalassemia (HbS/β-thalassemia) is a rare variant of sickle cell disease (SCD) occurring when both HbS and β-thalassemia genes are inherited. The severity of the condition depends on the amount of normal haemoglobin produced by the β-thalassemia gene. The oral and maxillofacial manifestations of sickle cell crises occurring in patients with this genotype have not been reported.

Methods: 208 SCD patients were surveyed via post, telephone or face-to-face interview on oral and maxillofacial sequelae of sickle-cell crises. Respondents identified as having HbS/β*-thalassemia were included in the study. HbS/β*-thalassemia patients, who produce no normal haemoglobin, were excluded.

Results: 12 patients met the inclusion criteria. 75% of patients reported sickle bone pain occurring at least once a month with the remainder experiencing pain less than once every 6 months. 50% described pain in the jaw and/or face during crises and 17% said that jaw pain had been confused with dental pain. One third of patients experienced sensory changes in the lip, chin or tongue. All patients who reported paraesthesia described it as temporary.

Conclusion: Clinicians should be aware of this rare group of patients as they may experience a high frequency of pain episodes. In order to avoid confusion with dental pain, it is suggested that patients who experience maxillofacial sequelae of sickle crises be referred to a Haematologist and Oral and Maxillofacial Surgeon for assessment and management. Future comparison with SCD genotypes will give better insight into the oral and maxillofacial manifestations of different haemoglobin variants of SCD.

Conflict of interest: None declared.


393 The impact of TMJ pain/discomfort and bone status on the activities of daily living

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Aim: The aim of this study was to investigate the impact of TMJ pain and bone status on the activities of daily living (ADL).

Material and methods: The study included 95 randomly selected participants who were asked to evaluate their influence on daily activities by pain/discomfort in the TMJ. A scale for the influence of TMJ pain/discomfort on the ADL was used. Bone mineral density was measured by using DEXA. The levels of serum type I collagen telopeptide fragments (PINP), C-telopeptide crosslaps of type I collagen (CTX-1) and vitamin D (25(OH)D) was analysed.

The variables were tested for differences between groups with the Mann–Whitney U-test. The significance of the correlations was tested by the Spearman rank correlation coefficient (r). Results: Activities of daily living were influenced by TMJ pain/discomfort in all participants at different levels. Pain/discomfort during eating was correlated with CTX-1 (p = 0.02) and P1NP (p = 0.04). The differences between sexes were found concerning D (25(OH)D) (p = 0.02) and most of the activities of daily living.

Conclusion: This study indicates that pain/discomfort from the TMJ is influenced by biochemical markers of bone turnover.

Conflict of interest: None declared.

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