Clinical Case Presentations

C1

Retarded eruption of all permanent teeth. An extreme case report

A ARHAKIS* & S DALAMPIRAS
Dental School, Aristotle University of Thessaloniki

Presenting problem: A 14 year old male patient with delayed eruption of all permanent teeth with the exception of maxillary first permanent molars was referred to our clinic. The clinical examination of the patient showed no signs of abnormality. Mental and physical development was normal for his age and there were no signs or symptoms supporting the presence of syndromes related to eruption problems. Blood tests were within normal limits and there was no history of such a problem in the family. Radiological examination showed that all permanent first molars were present but only the maxillary first molars had erupted. In order to achieve spontaneous eruption of their permanent successors a general practitioner extracted the central primary mandibular incisors. However no eruption of the permanent successors was observed over a period of two years.
Clinical management: A decision was made to surgically expose the crowns of the permanent central incisors in the lower jaw in order to promote spontaneous eruption. A year after the operation these teeth together with the mandibular third molars were partially erupted. No other teeth had erupted at this stage.
Discussion: A case of delayed eruption of all permanent teeth is very rare, especially when it is not related to any known syndrome. The pathogenesis is a diagnostic riddle and the treatment demands a very careful approach.

C2

Management of a patient exhibiting concomitant supernumerary teeth and hypodontia

C. L. PATCHETT*, A. E. SARGISON & B. O. I. COLE
Newcastle Dental Hospital, UK

Presenting problem: A 9-year-old boy was referred by his General Dental Practitioner for the management of supernumerary teeth in the anterior maxilla. The child had little experience of dental treatment but was concerned with the aesthetics of his teeth. He was medically fit and well. Clinical and radiographic examination revealed the presence of a supplemental megadont tooth in the position of 11, an erupted palatal tuberculate supernumerary tooth causing displacement on closure and hypodontia of 35 and 45 with infraocclusion of 75. Orthodontically, the patient had a Class II division 1 incisal relationship on a mild Class II skeletal base. He was severely crowded in the upper arch but the lower arch was well aligned. Oral hygiene was noted to be poor.
Clinical management: All treatment was provided under the close supervision of an Associate Specialist in Orthodontics and initially involved extraction of 53 and the palatal supernumerary tooth and thorough oral hygiene instruction and preventive advice. Following further dental development, the megadont tooth and 24 were extracted to facilitate orthodontic alignment with an upper fixed appliance. A heat-treated gold onlay has been provided for 75 and 85 is currently monitored for signs of infraocclusion.
Discussion: There are few reported cases in the literature of concomitant supernumerary teeth and hypodontia. This case describes the multi-disciplinary management of a child with a complex dental problem.

C3

Undiagnosed cardiomyopathy in a child with features of Papillon Lefevre syndrome

P. DAY[1]*, S. FAYLE[1], M. JUDGE[2], K. SUVARNA[3] & C. MILROY[3]
[1]*Leeds Dental Institute, Leeds;* [2]*Paediatric Dermatology, Hope Hospital, Manchester;* [3]*Department of Histopathology, Northern General Hospital, Sheffield, UK*

Presenting problem: We report on a child under long-term dental care for prepubertal periodontitis, premature root resorption of primary teeth, granulomatous, furrowed cobblestone oral mucosa and gingivae, hypodontia and peg shaped lateral incisors, caries and angular cheilitis who suffered a sudden unexpected death. Subsequent post mortem confirmed an undiagnosed dilated cardiomyopathy. This may have triggered ventricular fibrillation, which caused her death. Prior to her death, she had also been seen by several dermatologists with respect to palmar plantar hyperkeratosis, striae keratoderma, wiry hair and abnormal finger nails.
Discussion: In spite of being seen by a number of clinicians in several centres in the UK a satisfactory clinical diagnosis was never established. A detailed search of the literature revealed no previously reported link between Papillon Lefevre syndrome and cardiac pathology. This case report details the patient's specific clinical presentation, which included features similar to ectodermal dysplasia, Papillon Lefevre or oral Crohn's associated with skin pathology. Possible diagnoses are suggested. Clinicians seeing similar features in future should send the child for cardiac screening to rule out any potentially life threatening pathology.

C4

Staphylococcus aureus infection associated with orofacial granulomatosis

F. GILCHRIST* & J. GIBSON
Edinburgh Postgraduate Dental Institute, UK

Presenting problem: A 6-year-old girl attended the Department of Paediatric Dentistry at Edinburgh Dental Institute complaining of swelling and blistering of her upper lips and adjacent gingivae, which had been present for approximately 1 month. The patient had an unremarkable medical history.
Clinical management: Examination revealed submandibular lymphadenopathy with vesiculation and erythema in the upper incisor region. There was swelling and crusting of the upper lip with slight swelling of the lower lip. Foetor oris was evident. An initial diagnosis of primary herpetic gingivostomatitis was made. Despite treatment the lesions did not resolve. At review, the patient's mother stated that the patient was now suffering abdominal pain and diarrhoea. Haematological investigations revealed no abnormalities. Punch biopsies of the lips carried out under general anaesthesia showed lymphoedema but no granulomata. It was felt by the pathologist that the appearance was of a secondarily infected lesion with an underlying allergic component, most likely to be orofacial granulomatosis (OFG). Swabs sent for bacterial and fungal culture identified no fungal species but

Staphlycoccous aureus was present in large numbers. The patient was prescribed Nystaform® cream and oral flucloxacillin which has improved the appearance of the upper lips. The patient has been referred for patch testing, and also to gastroenterology for investigation.

Discussion: Staphylococcal mucositis has been reported previously in a series of patients with OFG. This case demonstrates an unusual presentation of *Staphylococcus aureus* infection, previously unreported, in a child with OFG.

C5

Oral submucous fibrosis in paediatric patients

M. L. HAYES[1]* & A. M. RICHARDS[2]
[1]*Senior House Officer, Birmingham Dental Hospital,* [2]*Consultant and Honorary Senior Lecturer in Oral Medicine, Birmingham Dental Hospital, Birmingham, UK*

Presenting complaint: This case report relates to two paediatric patients, aged 11 and 13 years, referred to the Birmingham Dental Hospital with limited oral opening. In both instances, this limitation of opening was of unknown duration but thought to be progressive in nature by the referring agent.

Clinical management: On examination, the inter-incisal opening was found to be approximately 15–20 mm. On questioning, a betel chewing habit was identified in both patients. The mucosa was found to be pale and taut in nature. Both patients and parents were counselled on the adverse effects of betel chewing and the possibility of tissue changes as a result. Symptomatic relief was provided with benzydamine hydrochloride and biopsies of the affected sites were carried out. A histological diagnosis of oral submucous fibrosis was made in both instances.

Discussion: Oral submucous fibrosis is recognized as a pre-malignant condition. It is thought to be associated with an epithelial inflammatory reaction and subsequent fibro-epithelial change. This can lead to epithelial atrophy and later mucosal stiffening. The occurrence of oral submucous fibrosis in younger patients is extremely uncommon. This case report highlights the importance of investigating the social history of presenting patients and the need to improve patient and parent education in relation to the habit of betel nut chewing.

C6

A case of facial cellulitis associated with a supplemental tooth

J. C. MITCHELL & M. AHLUWALIA*
Department of Paediatric Dentistry, King's College Dental Institute, London, UK

Presenting problem: An 8-year-old boy presented with a facial cellulitis. This appeared to be associated with the right maxillary lateral incisor.

Clinical management: There was no history of dental trauma. It was reported that a primary supplemental tooth had been present in the right premaxilla. On examination the right maxillary lateral incisor had a deep palatal pit and was grade 3 mobile. There was evidence of a tooth erupting palatal to this tooth. The radiographic examination suggested the right lateral incisor tooth was supplemental, invaginated and had an apical radiolucent area. The acute infection was managed by extirpating the pulp and dressing the supplemental tooth with non-setting calcium hydroxide. It was later removed under inhalation sedation and local anaesthetic. The ectopic tooth was monitored and subsequently erupted palatally. This may require orthodontic interception in the future for the correction of a crossbite.

Discussion: The prevalence of supernumerary teeth in the permanent dentition has been reported as 0.1–3.8%. They are less frequently seen in the primary dentition. However, it is not uncommon for a child to present with dental anomalies in both dentitions. In this case study, the subject had a supplemental lateral incisor in both the primary and permanent dentition. The permanent supplemental tooth was invaginated, confirmed by histological examination. The cellulitis was therefore caused by the invaginated odontome.

C7

Management of hypodontia and caries in a dry mouth

N. YOUNG* & S. NORTH
Department of Paediatric Dentistry, Charles Clifford Dental Hospital, Sheffield, UK

Presenting problem: A fit and well 14-year-old girl was referred by a Consultant Orthodontist for management of her hypodontia. The patient's complaint was of difficulty chewing and poor dental appearance. Previous dental treatment comprised fissure sealants on first permanent molars and anterior restorations. A bilateral posterior open bite was present with a class three incisor relationship on a skeletal base III. Soft tissue examination revealed a dry mouth with a sinus associated with 53.There was severe hypodontia with retained 53, 55, 63, and 65. Caries was present in 11, 12, 16, 21, 22, 26, 36, 46, 53, 63, and 65.

Clinical management: A rigorous preventive programme was implemented together with investigation of the cause of the xerostomia. Fissure sealants were placed on all non-carious molars and premolars. Carious teeth were restored with composite, amalgam and preformed metal crowns all under local anaesthesia. The pulp of non-vital 53 was extirpated and calcium hydroxide was placed to the extent of the root canal.

Discussion: Diagnosis of the xerostomia was an important clinical finding, which had major implications for this patient with hypodontia. A combined team approach will be used to correct her malocclusion and provide a long-term stable dentition.