

Poster Display

p1

Denys Drash Syndrome: a case report

A. B. AMMARI* & D. FUNG

Royal Hospital for Sick Children, Glasgow, UK

Presenting problem. Denys Drash Syndrome (DDS) is a rare disorder usually appearing sporadically. It typically consists of a triad of Congenital Nephropathy, Wilms tumour and Intersex disorder. Only 150 cases have been reported to date, but to our knowledge dental problems have not been recorded. A 9 years old female with DDS was referred to the Dental department complaining of discoloured teeth.

Clinical management. The patient suffered with epilepsy and developmental delay and was diagnosed with Nephrotic syndrome at age 2 weeks. She was on renal dialysis until 4.5 years following which a cadaveric renal transplant was carried out. Her medication included Tacrolimus, Prednisolone, Epilim, Nifedipine and Augmentin. Clinically her teeth were hypoplastic with a dark amber colouration. Her oral hygiene was excellent but there were areas of mild gingival hyperplasia. Radiographically the roots of the permanent molar teeth showed a prominent divergence with increased root width making the cervical constriction more apparent. The upper and lower incisors were masked with composite as an interim measure to improve the appearance of her teeth.

Discussion. The discolouration and hypoplasia in this case may be the result of early renal failure or a dental manifestation of DDS. The marginal gingival hyperplasia was probably the result of Epilim and Nifedipine medication.

p2

Caries status of five year olds attending two cleft centres

V. CLARK¹ & D. FRANKLIN²

¹Birmingham Children's Hospital, ²Bristol Dental Hospital

Aim. To compare the caries experience of children aged five years with cleft lip and palate attending the regional West Midlands Cleft Clinic in Birmingham and the audit clinic at Frenchay Hospital (Bristol) between January 2002 and December 2004.

Method. All children aged 5 years in each centre were examined by a Consultant Paediatric Dentist for caries using the BASCD standard criteria.

Results. A total of 155 children were examined in Birmingham and 50 in Bristol over the 3 year period. The mean number of decayed missing and filled primary teeth (dmft) can be seen in the table below. 46% of the total number of patients examined in both centres had experience of dental caries.

	West Midlands	Bristol
Total mean dmft	2.29	1.64
Decayed teeth (dt)	1.43	1.04
Missing teeth (mt)	0.61	0.16
Filled teeth (ft)	0.25	0.44

Conclusion. Although the decay experience in these groups is similar to the 43% found in the 2003 survey of Children's Dental Health in the United Kingdom, it is higher than that of the West Midlands and Bristol. These results provide further evidence of increased caries experience in children with cleft lip and palate.

p3

An unusual presentation of dermatitis artefacta: a case report

M. M. COLLARD*, M. L. HUNTER & M. LEWIS

Cardiff and Vale NHS Trust and Cardiff University (Wales College of Medicine)

Self-inflicted trauma is found in several patient groups including those with learning and developmental delay, the very young and those suffering from psychiatric disturbance. The diagnosis of artefactual disease can be made only when all possible organic disease has been excluded by specific investigations. The case presented is that of a 15 year old girl complaining of persistent bleeding and crusting of her lips for the preceding 3 months. Investigations including blood tests and biopsy provided no real information as to the cause of the allegedly spontaneous bleeding. The diagnosis of artefactual disease was finally decided upon and a referral to a child and adolescent psychologist made. This case clearly illustrates the importance of considering a psychological disorder in the differential diagnosis of conditions appearing with unusual clinical signs.

p4

Oral health education for Somali families: experiences with e-learning

J. COWLAM*, H. D. RODD, A. HASHI & L. E. DAVIDSON

Department of Oral Health and Development, School of Clinical Dentistry, University of Sheffield, UK

Aim of the research. Sheffield is home to a large Somali population, comprising mostly women and children. Previous studies have identified that Somali children have high caries rates, irregular dental attendance and may be subject to the traditional practice of primary canine enucleation. The aim of this study, therefore, was to develop and evaluate an electronic oral health education resource for this priority group. **Methods.** A 20-minute interactive multi-media dental health education programme was designed and produced on CD-ROM. No previous IT experience was necessary to access the package as users were prompted by spoken instructions (in Somali or English). The programme was installed on customised portable PCs and was disseminated to 20 Somali households for a period of one week, prior to a structured evaluation. A visual analogue scale (VAS) was employed to quantify responses, where 0 = the most negative response and 10 = the most positive response.

Principal results. 90% of the Somali women interviewed reported that they had never previously received any dental health education for their families. 50% had never used a computer before. There was very positive feedback for the learning resource in terms of ease of use (mean VAS = 7.9, SD = 1.1), enjoyment (mean VAS = 7.7, SD = 1.0), and educational value (mean VAS = 7.8, SD = 1.7). There was a significant increase in dental health-related knowledge following the provision of the learning package ($P < 0.05$, independent sample t -test).

Conclusion. Findings from this preliminary study would suggest that interactive e-learning programmes offer an acceptable and effective means of dental health education delivery to isolated groups.

p5

Quality of referrals to Newcastle's Department of Child Dental Health

R. M. GIBSON*, C. L. PATCHETT & B. O. I. COLE

Newcastle Dental Hospital

Aim. The GDC's publication 'Maintaining Standards' provides ethical guidelines and defines responsibilities of both referring and treating dentists when a referral to secondary care is required. This audit aims to investigate the quality of referral letters to the Department of Child Dental Health (CDH).

Methods. Records of 96 consecutive patients referred for treatment were audited retrospectively. Essential information was defined as patient's name, DOB, address, medical history and treatment requested.

Principal results. 65% of referrals were missing essential information. Information as specified for inclusion in, 'Maintaining Standards' for general anaesthetics was omitted in 70% of referrals. Treatment provided matched treatment requested in 25% of cases and 80% of the referrals from areas outside the NE postcodes were suitable for treatment locally.

Conclusions. The general standard of referrals to CDH at Newcastle Dental Hospital (NDH) falls below that recommended by Maintaining Standards. Essential information is not being conveyed which could potentially affect the standard of patient care provided. The introduction of an electronic standardised referral form that requires the input of specific information could improve information transfer.

Extension. NDH has recently introduced a website based referral form. Unfortunately many General Dental Practitioner's are still unaware of its existence and developments are ongoing.

p6

Developing dental undergraduate outreach experience at Newcastle – the challenge

V. HIND¹*, P. J. WATERHOUSE¹, G. WALTON², D. TABARI², J. LLOYD¹ & A. MAGUIRE¹

¹School of Dental Sciences, University of Newcastle, UK, ²Newcastle Primary Care Trust

Background. Outreach teaching – clinical placement in a primary care setting – was recommended in The First Five Years (General Dental Council 2002) and Options for Change (Department of Health 2002).

Aims. To develop an Outreach Dentistry Course at Newcastle meeting national recommendations for teaching and learning.

Approach. A complex network structure course has been used to include Paediatric Dentistry, Dental Public Health and Restorative Dentistry components. The Paediatric Dentistry component commenced in September 2004 delivering one session of clinical and seminar activity to each 4th year student every two weeks, with intended learning outcomes complementary to existing school-based teaching and learning activity.

Results. After 2 terms of Outreach teaching, 60% of students had demonstrated competence in sterilization procedures, 37% in referral letter writing and 29% in prescription writing while Outreach clinical activity was very similar to school-based Paediatric Dentistry in the same year.

Future developments. Current plans are for undergraduate Outreach experience to extend into 5th clinical year allowing further development of competency-based clinical experience complementary to school-based clinical activity.

p7

The *in vitro* erosive potential of 'ready to feed' infant juices

M. L. HUNTER¹*, S. O. ADDY¹, T. J. DURKAN¹, C. BLAKYTON¹ & B. HUNTER²

¹Cardiff University Dental School, ²Cardiff and Vale NHS Trust

Aim. To establish the *in vitro* erosive potential of five 'ready to feed' baby fruit juices as compared to both water and a 'ready to drink' fruit beverage with previously demonstrated low erosive potential.

Method. Six specimens of primary enamel were randomly allocated to each of the seven products and a '4 hour' protocol employed.

Results. The five 'ready to feed' infant products showed heterogeneity in their *in vitro* erosive potential. However, the erosive potential of all of these products was statistically significantly greater than that of both water and a 'ready to drink' beverage with previously demonstrated low erosive potential.

Conclusions. The results of this study are clinically important given the increased susceptibility of primary enamel to erosion and the reduced dimensions of the primary dentition. Since product modification is limited by Government and EU recommendations regarding infant foods, advice that 'ready to feed' fruit juices should be confined to mealtimes and never given in a feeding bottle, a 'sucking cup' or at bedtime should be both clear and consistent.

p8

The effect of a Community Dental Service (CDS) outreach teaching programme on the confidence of undergraduate students: a pilot study

M. L. HUNTER¹, R. LEWIS²* & B. HUNTER²

¹Cardiff University Dental School, ²Cardiff and Vale NHS Trust

Aim. To examine the effect of an established CDS outreach teaching programme on undergraduates' confidence to undertake a range of procedures commonly used in the treatment of child patients.

Method. Eighteen final year dental students completed a questionnaire prior to, and following participation in an outreach teaching programme in the local CDS. On each occasion, the students were asked to identify (using a 6-point scale) how confident they felt to carry out each of 21 procedures commonly encountered in the treatment of children.

Results. Mean scores at each time point show that students were more confident to carry out each of the 21 procedures following participation in the outreach teaching programme than they had been on completion of their allocated sessions in the academic department.

Conclusions. The established Community Dental Service outreach teaching programme run by Cardiff University Dental School in conjunction with the staff of Cardiff and Vale NHS Trust is a valuable adjunct to undergraduate teaching in Paediatric Dentistry.

p9

Childhood odontogenic fibromyxoma – a case report

R. JOHN*, E. FYFE & C. NAVARRO

Bristol Dental Hospital, Bristol, UK

Presenting problem. An incidental finding of odontogenic fibromyxoma in a six year old boy referred for behaviour management and treatment of multiple carious teeth is presented. The child was attending the Department of Paediatric Dentistry for acclimatization and restoration of the carious teeth. On the third visit, he presented with a firm, non-tender, expansile swelling extending from the lower left first permanent molar to the ramus of the mandible.

Clinical management. A panoramic radiograph revealed a large lytic radiolucent lesion in the left side of the mandible. Other investigations included an incisional biopsy, MRI and CT scan which suggested a long standing non aggressive lesion. The mass was surgically excised via an intraoral approach under a general anaesthetic and subjected to

histopathological investigation. A final confirmatory diagnosis of odontogenic fibromyxoma was established. Post-operative healing was complicated with dehiscence and paraesthesia of the lower lip. A review at seven months revealed satisfactory healing of the surgical site with no sign of recurrence clinically and radiographically.

Discussion. Odontogenic myxoma is an uncommon tumor, seldom seen before the second decade of life. It proliferates slowly but is locally aggressive with a high recurrence rate. Indefinite follow up is necessary.

p10

Which children 'deserve' primary dentition restorative dentistry under DGA?

C. LAN HING LIT, K. SIVASUBRAMANIAM & M. HARRISON*

GKT Dental Institute, London

Aim. To investigate whether there were differences in dental disease experience between EXO and FMR groups.

Introduction. A group of PCTs in South East London wanted to fund more paediatric DGA sessions from their local hospital provider, Guy's Dental Hospital. They discovered that some DGA sessions treated 10 children, whereas others only treated 3. In order to explain the decision processes involved in planning either for exodontia only (EXO) on a short-case, non-intubated basis, or full-mouth rehabilitation (FMR) with intubated anaesthesia, we examined the differences between the two groups to establish whether our DGA planning was rational or random.

Method. Retrospective casenote study of age- and d.m.f.-matched pairs of healthy EXO and FMR cases over a 6 month period. Selection criteria of maximum age 6 years and minimum of 1 second primary molar restored or extracted were imposed.

Results. 102 children consisting of 51 matched pairs were identified. Apart from exclusive use of EXO for children with facial swelling, no significant difference was found between the EXO and FMR groups for all other aspects of the pain or infection history and previous dental experience.

Conclusion. Whilst clinicians in the unit felt they were making an informed decision as to whether a child was suitable (or could wait) for restorative work under DGA, the decision seems to be mostly arbitrary. Whether one option benefits the child more than another is an altogether more difficult question to answer. Purchasers of a DGA service may opt for the procedure which allows highest throughput.

p11

Survival rates of occlusal vs. proximal restorations in primary and permanent teeth

D. MUSTAFA*, G. ROBERTS & G. PEARSON

Eastman Dental Institute, UCL

288 restorations placed in the primary ($n = 244$) and permanent ($n = 64$) teeth of 152 children and adolescents were evaluated over a 24 month period as part of a clinical trial assessing four different restorative materials [amalgam (Dispersalloy), resin modified glass ionomer (Fuji II LC and Vitremer) and compomer (Dyract AP)]. The following abstract presents survival rates from occlusal vs. proximal restored surfaces only.

Aims. Evaluate the 2 year cumulative survival of proximal vs occlusal restorations (data from different restorative materials combined).

Methods. 156 occlusal and 132 proximal restorations were placed in primary molars and 1st permanent molars/premolars using a minimal intervention technique. Teeth with multi-surface caries and/or developmental enamel defects were excluded. Rubber dam isolation was used where possible. Assessment of restorations was according to modified Ryge criteria at baseline, 6, 12, 24 months. Cumulative survival of the restorations (occlusal vs. proximal) was analysed using Berkson Gage life-table approach.

Principal results. More proximal restorations ($n = 22$, 17%) needed replacement when compared to occlusal restorations ($n = 8$, 5%). This was marginally significant ($P = 0.045$).

Conclusion. During 24 months proximal restorations tended to fail more frequently when compared to occlusal restorations.

p12

The oral health and preventive habits of phenylketonuria paediatric patients

A. BUSUTTL NAUDI*, E. WADHWA, D. E. FUNG & R. R. WELBURY

Royal Hospital for Sick Children, Yorkhill, Glasgow

Aim. To evaluate the oral health of children with PKU and to determine what preventive behaviour, if any, they are adopting.

Methods. 21 male and 14 female children (1–16 years) underwent an oral examination. Their parents were asked to complete a questionnaire, relating to oral hygiene habits, attendance for treatment, past dental treatment and dietary habits.

Results. 32 (91%) of the parents claimed that their children were registered with a dentist and attended for dental examination regularly. 24 (69%) of the children said that they brushed their teeth twice daily using fluoride toothpaste. However 23 (66%) had required treatment for caries and 13 (37%) had needed a general anaesthetic. Only 7 (20%) of the children had not needed any treatment. The dmft results were compared to national figures. In the primary dentition there was a low dmft but in the adult dentition DMFT compared poorly.

Conclusion. Initially children had a low caries rate and treatment need. However these increased with age. This may be attributed to a decrease in parental control of diet and preventive behaviour with age.

p13

Case report: three-year-old presenting with intraosseous vascular mandibular lesion

S. NORTH, R. CRAWFORD* & S. E. WARD

Charles Clifford Dental Hospital, Sheffield, UK

Presenting problem. A well-looking three-year-old boy attended the Paediatric Dentistry Clinic following General Medical Practitioner referral. Some six weeks earlier his mother had noticed swelling of his left cheek, there was no associated pain or tenderness. Examination revealed bony expansion of the left mandible while extra- and intra-oral soft tissues were of normal colour. There was a full complement of healthy, deciduous teeth though 75 was slightly mobile and extruded. Radiographs revealed diffuse rarefaction 75 distal root and reduced clarity of 35 follicle.

Clinical management. Incisional biopsy revealed a perforation in the buccal plate; the moderate haemorrhage was controlled with bone wax. Histology reported intraosseous haemangioma. Within two months 75 had increased in mobility and the surrounding gingiva was exophytic with occasional bleeding. It was decided to extract 75 the resultant bleeding being controlled with diathermy, bone wax, suturing and pressure. Subsequent increase in size of the lesion led to angiography showing a highly vascular lesion with arteriovenous shunting: the lingual artery was embolised with polyvinyl alcohol particles. When reviewed seven years later, growth and development had proceeded normally with no effect on facial or alveolar symmetry.

Discussion. Intraosseous haemangiomas are rare. However, in view of the potential outcome early diagnosis is important. Signs and symptoms include displaced teeth with/without haemorrhage, bony expansion, pulsation and bruit. Various treatments include ligation of feeder vessels, embolotherapy, radiation therapy, cryotherapy, injection of sclerosing agents and surgery. Paediatric dentists may be the first professionals to see the patient and thus play a key role in diagnosis.

p14

Case report: dental management of X-linked hypophosphataemic rickets

S. NORTH, N. YOUNG* & L. E. DAVIDSON

Charles Clifford Dental Hospital, Sheffield, UK

Presenting problem. A five-year-old boy with known hypophosphataemia was referred by the Professor of Paediatric Metabolic Bone Disease for management of his deciduous dentition. Dental history was of a regular attender who had received no active treatment. Examination revealed a full complement of apparently healthy deciduous teeth; however there was expansion of the mandible buccally in the lower incisor region. Buccal sinuses were associated with 51, 61 and 81 while 71 and 81 were mobile. Radiographic examination revealed all permanent teeth developing with the exception of third molars. A large radiolucent area was noted in the midline of the mandible extending from 72 to 82. The crowns of the teeth had large pulp chambers.

Clinical management. Separators were placed between all first and second deciduous molars. Under general anaesthesia fissure sealants were placed on the deciduous canines, stainless steel crowns fitted without tooth preparation to all deciduous molars and the deciduous incisors extracted. Radiographic examination 8 months post-surgery confirmed resolution of the radiolucent area. Subsequently fissure sealants have been placed on 31 and 41.

Discussion. X-linked hypophosphataemic rickets exhibits many dental features including thin enamel, interglobular dentine and enlarged pulp chambers with the cornua extending into the dentino-enamel junction. Clinically multiple abscesses associated with micro-exposures may be seen in both primary and permanent dentitions. Practitioners should be aware of the potential for loss of vitality of the teeth and the sequelae.

p15

Pulpal expression of vanilloid receptor 1 in hypomineralised molars

H. D. RODD¹*, C. R. MORGAN¹, P. F. DAY² & F. M. BOISSONADE¹

¹School of Clinical Dentistry, University of Sheffield, ²Department of Paediatric Dentistry, Leeds Dental Institute, University of Leeds, UK

Aim of the research. The vanilloid receptor 1 (TRPV1) is thought to play an integral role in the development of inflammation and nociception. There is growing evidence that this ion channel may function primarily as a noxious heat sensor. This study sought to compare pulpal expression of TRPV1 in intact and hypomineralised teeth, in view of their reported hypersensitivity to thermal stimuli.

Methods. The experimental material comprised 17 sound and 18 hypomineralised first permanent molars, obtained from children requiring routine dental extractions under general anaesthesia. Pulp sections were processed for indirect immunofluorescence using antibodies raised against TRPV1 and either the general neuronal marker, protein gene product 9-5, or alpha smooth muscle actin in conjunction with *Ulex europaeus* I lectin to fully label the pulp vasculature. Computerised image analysis was used to quantify the expression of TRPV1 in both pulpal nerves and blood vessels.

Principal results. Analysis revealed that TRPV1 labelling was not confined to pulpal nerves but also expressed within pulpal blood vessels. Expression of neuronal TRPV1 was significantly greater within hypomineralised teeth than intact samples ($P < 0.05$, independent sample *t*-test). In addition, vascular expression of TRPV1 was also significantly increased in hypomineralised teeth.

Conclusion. Increased expression of TRPV1 within the pulps of hypomineralised teeth may have relevance in the development of pulpal inflammation, and may provide a new insight into the thermal sensitivity experienced by some young patients with this enamel defect.

p16

Mechanisms of dentoalveolar trauma – a comparison between Glasgow and Sydney

C. M. VINCENT*, C. FORBES, G. WRIGHT, G. MCGLASHAN, A. BELL & R. R. WELBURY

Glasgow Dental School, UK

Objectives. To compare the presentation of dentoalveolar trauma at two centres: Glasgow Dental Hospital and School, Scotland and Royal Alexandria Hospital for Children, Sydney, Australia.

Methods. This was a retrospective cross-sectional study. Clinical data was recorded at the time of the incident and transferred to a machine readable sheet. Patients were included if they attended with dentoalveolar trauma at any time during the study period. There were 398 study patients in Glasgow and 110 in Sydney.

Results. Falls were responsible for 49.4% injuries in Glasgow and 55.4% in Sydney. Organised sporting activities caused injury in 18.3% cases in Glasgow and 4.5% in Sydney. Bikes and scooters caused 12.8% injuries in Glasgow and 20.0% in Sydney. Periodontal ligament (PL) injuries were commonest in the primary dentition. Hard tissue injuries were commonest in the secondary dentition. In both the primary and secondary dentition PL injuries were significantly higher in Sydney. Hard tissue injuries were higher in the secondary dentition in Glasgow but similar in primary dentition.

Conclusion. Falls were the commonest cause of injury in both Glasgow and Sydney in both the primary and secondary dentition. Overall, hard tissue injuries were commonest in Glasgow and PL injuries in Sydney.

p17

Who accompanies children on a visit to the dental hospital?

P. K. VIRDEE* & H. D. RODD

Department of Oral Health and Development, School of Clinical Dentistry, Sheffield, UK

Aim of the research. Children are generally reliant on adults to take them to their dental appointments. The accompanying adult should, ideally, be able to provide an accurate history of the presenting complaint and the child's medical status, as well as give legal consent for treatment. This study sought to determine who actually accompanies children on a visit to a hospital paediatric dental clinic.

Methods. The relationship of all adults accompanying a child to the Sheffield paediatric dentistry clinic was recorded for two months, including a two-week school holiday period. Data were subdivided according to the nature of the visit: casual attendance, treatment visit, recall or new patient appointment.

Principal results. Data were obtained for 321 children. In the vast majority of cases (63%), children were accompanied by their mother. However, patients were also frequently brought by their fathers (14%), both parents (11%), a grandparent (5%) or an older sibling (2%). A small number of children (<2%) were accompanied by an aunt, uncle, step-parent or foster-carer. The presence of at least one parent was most likely at a new patient appointment (97%), followed by a recall visit (94%) or treatment visit (90%). Casual attendees were the least likely to have an accompanying parent (84%). The presence of a parent was not significantly different during school holidays as compared to term time ($P < 0.05$, Chi squared test).

Conclusion. Children who seek emergency dental care are least likely to be brought by a parent, which has implications in terms of eliciting a valid history and obtaining consent.

p18

Paediatric Dentistry – are we teaching what the General Dental Council Expect?

P. J. WATERHOUSE* & A. MAGUIRE

School of Dental Sciences, University of Newcastle, UK

Aims. To assess an existing teaching curriculum in Paediatric Dentistry and develop relevant teaching strategies for a new Outreach Dentistry course.

Methods. The intended learning outcomes (ILOs) in the established teaching themes within Paediatric Dentistry were mapped against the ILOs in the relevant domains of The First Five Years (General Dental Council 2002). Those ILOs from the First Five Years not fully met by the existing course were recorded and used in the context of the new course design.

Results. Eleven Intended Learning Outcomes expected by the GDC were not fully met by the Paediatric Dentistry course, spanning 3 of the 4 themes within the existing course. These ILOs were concerned with knowledge and understanding, specific clinical skills, transferable skills and attitudes and beliefs, (e.g. team working in primary care, liaison with other health care professionals and the referral of complex cases to specialist care). Multiple teaching and learning strategies were proposed within the new Outreach Dentistry course design including small group teaching, clinical experience and competency-based assessment.

Conclusion. The existing Paediatric Dentistry curriculum content was successfully mapped to the First Five Years and teaching strategies developed for a new Outreach Dentistry course which complemented existing teaching within Paediatric Dentistry.

p19

An Overview of the dens invaginatus, with case examples

R. WHATLING*, M. VAIDYANATHAN & J. M. FEARNE

Bart's and the London NHS Trust

Dens Invaginatus is a rare malformation of teeth in which there is a deepening of the cingulum as a result of infolding of the enamel and dentine. The severity of this varies, from extending into the pulp cavity, to extreme forms in which the invagination extends through the root resulting in a second root apex, and complex morphology of the root canal system. Early detection is crucial as treatment of symptomatic cases can be difficult, and success rates of treatment are poor. The following cases report on the different management approaches to dens invaginatus and illustrate the difficulties encountered in managing such cases. Case 1 demonstrates a successful conservative and preventive approach. Case 2 was successfully root canal filled. In the third case endodontic treatment was used as an interim maintenance measure. The fourth case, with delayed presentation had cystic formation and was extracted following failed endodontics. 2 final cases are discussed which were replaced with adhesive bridgework and implants following extraction. These reports highlight the difficulties in managing this anomaly and the importance of early diagnosis both clinically and radiographically. Early cleansing and composite sealing of the invagination can prevent further complications.

p20

Space loss following dilaceration of an incisor: 2 case reports

C. E. C. S. WILLIAMS*¹ & J. M. FEARNE²

¹Eastman Dental Hospital, ²Bart's and the Royal London

Dilaceration of the permanent incisor may occur following injury to the primary predecessor. In the following 2 cases a malformed, unerupted permanent incisor was present following a history of trauma to the primary incisor. Space loss occurred in both cases. Case 1 (AC) presented at age 9 with unerupted left central and lateral incisors and retained primary predecessors. Radiographs revealed dilaceration of the unerupted left lateral incisor. Case 2 (RR) presented late at almost 14 years with an unerupted, dilacerated upper right central incisor; extensive space loss having occurred. Surgical removal of the malformed tooth took place for both cases: under local anaesthesia for AC and general anaesthesia for RR. For AC further incisor space loss was prevented using a removable space maintainer to allow the permanent incisor to erupt. In RR residual space was closed using composite.

Conclusion. Both AC and RR are happy with their treatment. The two cases illustrate two different ways of managing space loss related to unerupted dilacerated incisors, and emphasise the importance of early diagnosis to aid optimal management.

p21

Review of labial fraenectomies at Alder Hey Children's Hospital (1999–2004)

H. ZAITOUN*, E. M. O'DWYER & J. C. COOPER

Alder Hey Children's Hospital

Aim of the research. To assess that labial fraenectomies were undertaken at the correct stage of the patient's dental development when the permanent canines have erupted in keeping with acceptable clinical practice.

Methods. Retrospective analysis of theatre day-books over a 5 year period was conducted. 75 patients' case notes were analysed recording the procedure undertaken, consultant's speciality, age of patient at time of operation, source of referral and presence of erupted permanent canines.

Principal results. A high proportion (60.9%) of labial fraenectomies were undertaken in children still in the mixed or primary dentition with unerupted permanent canines. The remaining 39.1% were completed in the permanent dentition. The principal source of referral was from General Dental Practitioners (34.8%) and Orthodontists (34.8%), followed by General Medical Practitioners (21.7%) and Community Dental Surgeons (8.7%). The patient's age ranged from 1 to 14 years, with a mean age of 8.7 years. The procedure was carried out by three surgical specialities including; dental and oral and maxillofacial surgery (87%), general surgery (8.7%) and plastics (4.35%).

Conclusion. In this review it was noted that the source of referral was related to the age of the patient. This suggests that a local policy should be implemented regarding the treatment of children who require labial fraenectomy and this should be circulated to referring clinicians. A further audit should be undertaken in five years time.

Copyright of International Journal of Paediatric Dentistry is the property of Blackwell Publishing Limited. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.