Poster Prize Category

PP1

Acceptability of pre-formed metal crowns: children's and parents' perspectives

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Background: There is a good evidence-base for favourable clinical outcomes of pre-formed metal crowns (PMC) in the primary dentition. However, little is known about views of children and parents on this restorative option.
Aim: To assess child and parent acceptability of PMCs.
Method: Questionnaires were developed with service-users and issued to 19 children aged 4–10 years who had received a PMC within the paediatric dentistry clinic, Sheffield Dental Hospital. Children completed a pictorial scale to indicate their experiences of treatment and views on PMCs. Parents completed a 5-item questionnaire using a 5-point Likert scale. Both children and parents were invited to comment on any other issues relating to PMCs and all responses were anonymised.
Results: Key findings were that 62% of children didn't mind/liked their PMC and 93% felt they had been well looked after on the clinic. 62% described the actual treatment as 'really easy' and a further 23% agreed the procedure was 'OK'. In response to the question '*I have no concerns about how the silver crown looks*', 85% of parents agreed or strongly agreed. All parents believed that clinicians had fully explained the justification for the PMC and felt it was doing a '*good job*' of protecting their child's tooth. All parents felt their child had coped well with the procedure and had been well looked after.
Conclusion: Good communication and clinical expertise is paramount to ensure children and parents have a positive attitude towards the benefits of PMCs as a restorative option for primary molars.

PP2

Primary dental care for cleft patients in South Wales

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Background: Children with cleft lip and/or palate have more dental disease compared with children in the general population. The Clinical Standards Advisory Group report (CSAG) 1998, recommended that dental services be provided for these patients throughout childhood and adolescence.
Aim: To determine the provision and access to primary dental care services for patients with cleft lip and/or palate in South Wales.
Method: This was a questionnaire-based pilot study. Parents/guardians of all 5–18 year-old patients attending cleft clinics at Morriston Hospital, Swansea and University Dental Hospital, Cardiff, were asked to fill out questionnaires. Thirty three questionnaires, filled over 3 months, were analysed.
Results: The majority of patients (90.3%, $n=28$) attended a dentist with 89.6% ($n=26$) receiving 6-monthly checkups. Over 66% ($n=20$) lived within five miles of their primary dental care provider and 16.6% ($n=5$) lived more than 10 miles away. Additional medical problems were found in over 30% ($n=9$) of the sample. Parents of 30% ($n=9$) found it difficult or impossible to access a NHS dentist; three of these children had significant medical problems.
Conclusion: A number of patients with cleft lip and/or palate find it difficult or impossible to access NHS primary dental care. Shortcomings in the services provided to this high risk group have been highlighted. Further research is needed at regional and national levels to evaluate the extent of the shortcomings and propose methods to overcome them.

PP3

Management of osteogenesis imperfecta with dentine dysplasia type II

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Background: Osteogenesis Imperfecta (OI) is a rare, usually autosomal dominant inherited condition characterized by brittle bones, susceptible to fracture. Approximately 50% of patients with OI have Dentinogenesis Imperfecta type I (DI I). Dentine Dysplasia type II (DD II), which follows an autosomal dominant inheritance pattern, exhibits similarities to DI I. The characteristic feature of DD II is the radiographic appearance of abnormal 'thistle-shaped' pulps. The following case describes a rarely described finding of DD II associated with OI.
Presenting complaint: A 14-year-old boy with OI, managed with oral bisphosphonates, was referred for extraction of tooth 36. There was concern about bisphosphonate use and osteonecrosis of the jaw following extractions. Clinical examination revealed caries in a number of teeth. Radiographic examination revealed abnormal 'thistle-shaped' pulps and other findings suggestive of DD II. No known family history was elicited.
Clinical management: The patient had all carious teeth restored under local anaesthetic. Before any extractions were carried out the patient had a blood test to assess the risk of oral bisphosphonate–induced osteonecrosis. The morning fasting serum C-terminal telopeptide (CTX) bone turnover marker was used to assess this risk. The patient's CTX level was 360pg/ml, which represented a low risk (<100mg/ml = high risk and 100–150mg/ml = moderate risk).
Discussion: This case highlights the rare finding of DD II associated with OI. It also raises the awareness of the recent availability of serum CTX testing to predict the risk of oral bisphosphonate-induced osteonecrosis.

PP4

Two siblings with Jalili Syndrome

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Background: Jalili Syndrome is a newly described condition characterised by autosomal recessive cone-rod dystrophy and amelogenesis imperfecta. The causative gene has been identified as CNNM4 on chromosome 2q11. The condition has been reported in ten families to date.
Presenting problem: Two Kosovan siblings aged 5 years (child A) and 8 years (child B) presented with hypoplastic, hypomineralsied amelogenesis imperfecta and dental caries. They were known to have cone-rod dystrophy.
Clinical management: A preventive regimen was implemented with the emphasis placed on assisted oral hygiene given the poor visual

acuity. Child A underwent restoration of the primary molars with stainless steel crowns and adhesive restorations. In the permanent dentition stainless steel crowns were placed on 16, 26, 36, 37, 46 and 47. The maxillary permanent central incisors showed a marked delay in eruption. Radiographically these teeth were characterised by a wide, spade-like coronal portion and delayed root formation relative to the patient's age. The 21 became non-vital due to a palatal invagination when it was partially erupted, and has been endodontically treated. Child B had an early eruption pattern with an almost complete permanent dentition present at 10 years old. He has undergone a course of fixed appliance therapy to correct severe anterior rotations and close space. The posterior dentition has been restored with nickel/chromium onlays and the anterior teeth with adhesive restorations.

Discussion: Previous families described with Jalili Syndrome have a similar dental phenotype however none have reported abnormalities of eruption.

PP5

Continuing oral healthcare in children treated for malignancies

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Background: In the UK, there are approximately 1200 new cases of childhood cancer each year. Currently at Bristol, there is no mechanism to ensure that the children being treated for childhood malignancies receive appropriate advice regarding oral care and prevention.

Aim: To ascertain the continuing oral healthcare in children treated for malignancies.

Standards: *SIGN guidelines 2007:* 6–16 year old children should brush their teeth twice a day using toothpaste containing at least 1000 ppm fluoride. *Royal College of Surgeons of England 2004:* Fluoride in the form of mouth rinses for children over 6 years of age may be used daily or weekly. *NICE guidelines-August 2005:* All children discharged after treatment for childhood malignancies should attend a dentist regularly.

Process: A questionnaire relating to oral health was sent out to 120 children between the ages of 3–16 years, who had undergone treatment for malignancy at the Bristol Children's Hospital.

Results: 10% of the children were not registered with a dentist. 32% had dental problems following treatment for cancer, of which 46% found it difficult to access dental care and 11% could not register with a dentist. Less than 50% were using high fluoride toothpaste and 82% were not using a fluoride mouthwash.

Discussion: The RCS, NICE and SIGN guidelines were not being followed. This high risk group did not have easy access to information regarding oral health care and prevention.

Implementation of findings: An information leaflet regarding oral care and prevention has been produced. Re-audit is planned in 5 months time.

PP6

Double teeth: review of cases at the Eastman Dental Hospital

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Background: A review of the literature has shown various alternatives for the management of double teeth, but no study has appraised the success of these options on a larger scale.

Aim: To review the literature describing the management of double teeth in the paediatric dental population and the management of cases presenting to the Eastman Dental Hospital in order to develop a protocol for the management of these teeth.

Method: A search was carried out on Medline and Embase for the following terms: double teeth, fused teeth, connated teeth, concrescence, gemination, twinning, macrodont and megadont. Further papers were identified from the references of the literature found and a review carried out. Cases treated at the Eastman Dental Hospital were identified. Information regarding the age of the patient, family history, teeth affected, other anomalies, treatment regime and follow up was recorded.

Results: Different treatment regimes were found in the literature, namely no treatment, orthodontics alone or orthodontics in combination with one of the following: reshaping the teeth with restorations, grinding of the teeth, hemisection with or without endodontic treatment or extraction. There was no specific protocol used in the management of these cases. Cases treated at the Eastman Dental Hospital had a multi-disciplinary approach, with the management being dictated by the need for space opening or closure and aesthetics.

Conclusion: A review of the cases in the literature and those managed at the Eastman Dental Hospital will facilitate the production of a protocol for the management of double teeth.