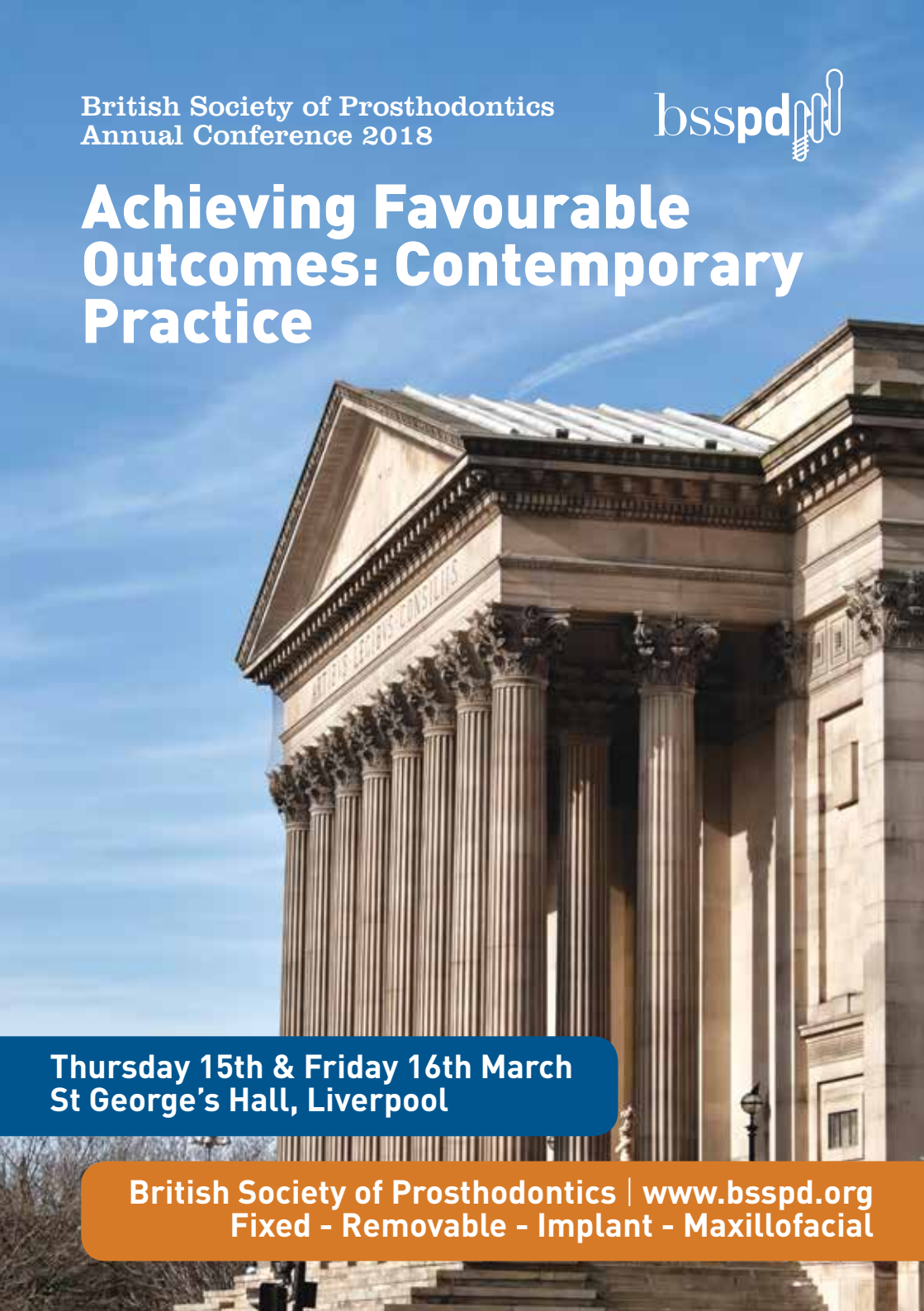
British Society of Prosthodontics
Annual Conference 2018

bsspd

Achieving Favourable Outcomes: Contemporary Practice



Thursday 15th & Friday 16th March
St George's Hall, Liverpool

British Society of Prosthodontics | www.bsspd.org
Fixed - Removable - Implant - Maxillofacial

Welcome

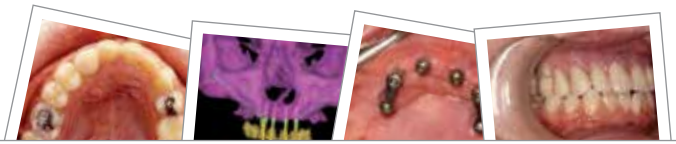
I am delighted to welcome you all to Liverpool and our Annual Conference. We are in one of the great maritime cities of the world with a waterfront that is recognised as a world heritage site, and we are situated in the magnificent Grade 1 listed St. Georges Hall.

I have had the good fortune to have been involved with many facets of dental education, research, clinical practice and with the BSSPD for many years. The majority of clinicians involved with prosthodontics recognise the increasing need to work within multidisciplinary teams that involve other dental and related specialties in order to deliver the personalised care our patients deserve.

It is with these thoughts in mind that the overarching conference theme is that of contemporary practice and multidisciplinary thinking for successful outcomes. Within this overall theme the conference divides into 2 distinct days. The first day considers the contemporary management of cleft lip and palate, an area that I have been involved with for a number of years. The opening day has an array of national and international speakers renowned in their field. I am particularly honoured that our conference will be opened by my esteemed colleague, Professor Sir Munir Pirmohammed, who is a world renowned expert in personalised medicine.

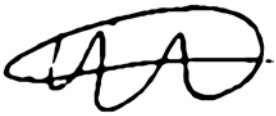
The second day of the conference will allow attendees to be brought up to date in periodontics, endodontics, prosthodontics and the ever changing landscape that is toothwear. I am delighted that for this we will be joined by a number of Dental Core Trainees and postgraduate students as they of course are crucially important to the future of dentistry and prosthodontics.

Interwoven within the programme is a strong research element including entrants for the prestigious Schottlander oral presentation prize and the Schottlander poster presentation display and prize. The society prides itself on providing a welcoming and friendly environment for young dentists to display their work and



talents and for them to network. To facilitate the latter and in a departure from the 'traditional' conference dinner, we have an informal buffet and 'mixer' on the Thursday evening. I hope that you will come along and socialise, perhaps before enjoying a little of the Liverpool nightlife.

I am immensely proud to have been President of the British Society of Prosthodontics and I am very grateful to the council for their unfailing support, and our members for their continued interest in seeking to deliver the highest possible standards of care underpinned by continuing education and research within one of our longest established specialist societies. I hope that you enjoy the conference and continue your involvement with the Society.



Phil Smith
President BSSPD 2017-18

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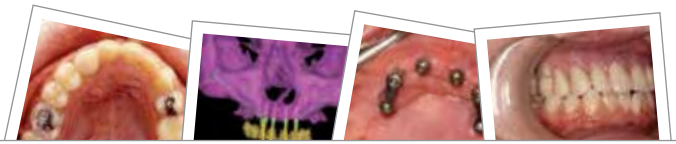
Conference programme

Thursday 15th March

08:30	Registration & coffee / trade show
	[Session Chair: Phil Smith]
09:30	**Welcome and opening of conference** Sir Munir Pirmohammed
09:45	**Overview CLP 'Why we are where we are. And where are we going?'** Bill Shaw
10:15	**Surgery in CLP: Achieving favourable outcomes - challenges and solutions** Simon Van Eeden
11:00	Coffee and trade
	[Session Chair: Phil Smith]
11:30	**Contemporary cleft orthodontics** Susana Dominguez-Gonzalez
12:15	**Psychology in CLP patients** Zoe Edwards
13:00	Lunch, trade and Schottlander poster viewing
	[Session Chair: Chris Butterworth]
14:30	**Fixed and removable prosthodontics in CLP** Andrew Barber
15:15	**Speech appliances and speech therapy in CLP** Sandip Popat and Ginette Phippen
16:00	Tea and trade
16:15	**Cases and Panel discussion**
17:00	**British Society of Prothodontics AGM**
19:00	Conference mixer drinks and finger buffet, St George's Hall

If you are presenting a poster please note that this will need to be put up on your allocated poster space at the conference venue by 10:00 on Thursday. You are asked to stand by your posters between 13:00 and 14.30 to answer questions from the delegates and judges. The posters do not need to be removed until Friday afternoon.



Friday 16th March

08:30	Registration and coffee / trade show
	[Session Chair: Tony Preston]
09:30	**Contemporary prosthodontic research** Schottlander Oral Presentations
11:00	Coffee and trade.
	[Session Chair: Tony Preston]
11:30	**Contemporary periodontics** Ian Needleman
12:30	Lunch and trade
	[Session Chair: Phil Taylor]
13:30	**Trouble shooting failed restorations** Peter Briggs
14:15	**Contemporary endodontics** Mark Hunter
15:00	**Contemporary removable prosthodontics** Craig Barclay
15:45	**Contemporary toothwear management** Alex Milosevic
16:30	**Prize announcements by Tony Preston**
16:35	**Handover to new president Phil Taylor**

Invited speakers

We are delighted to have a number of renowned specialists in the area of prosthodontics speaking at our 65th annual conference in Liverpool

Professor Bill Shaw

Overview CLP 'Why we are where we are. And where are we going?'

After graduation in Glasgow, Bill Shaw held house officer and registrar posts in Manchester from 1968 till 1971. His career in orthodontics and cleft care in Cardiff, included an interest in determination of clinical need and clinical standards, prior to a professorship in Manchester in 1983, and a subsequent spell as Dean in 1995-98.

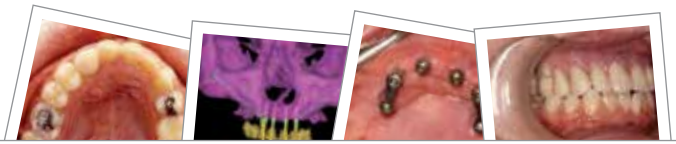
He established the Cochrane Collaboration Oral Health Group with Helen Worthington, and a World Health Organisation Collaborating Centre for craniofacial anomalies. From 1976 his clinical practice was confined to cleft lip and palate and his research with his wife Gunvor and other friends and colleagues includes several long term collaborative multinational projects sponsored by the European Commission, and randomised trials of cleft treatment funded by the National Institutes of Health (USA). He is a CBE and Fellow of the Academy of Medical Sciences.

Mr Simon van Eeden

Surgery in CLP: Achieving favourable outcomes - challenges and solutions

Simon van Eeden completed undergraduate Dental and Medical training and post-graduate Maxillofacial surgical training in South Africa. On moving to the UK he completed a further 4 years of higher surgical training on the Oxford training rotation culminating in a CCT in Oral and Maxillofacial surgery in 2006. This was followed by a 2 year Training Interface Group (TIG) Fellowship in Cleft surgery at Great Ormond Street hospital completing this in 2008.

Simon started as a consultant Cleft and Oral and Maxillofacial surgeon at Alder Hey and Aintree University Hospitals in Liverpool in 2008 and was the clinical director of the North West, Isle of Man and North Wales Cleft Network from 2011-2017. He currently sits on the Cleft TIG Committee, the Surgical Advisory



Committee for Oral and Maxillofacial Surgery and is the Chair of the Cleft Development Group.

Dr Susana Dominguez-Gonzalez

Contemporary cleft orthodontics

Susana Dominguez-Gonzalez has been a Consultant Orthodontist at Alder Hey Children's Hospital in Liverpool over the past 12 years. She works for the Northwest of England, Isle of Man and North Wales Cleft Lip and Palate Network as well as being the Orthodontist for Alder Hey Supra-regional Craniofacial Unit. Susana is the Clinical Director for the Dental and Maxillofacial Department at Alder Hey Children's Hospital, Honorary Lecturer at the University of Liverpool and Educational supervisor for the Regional Orthodontic Post CCST Trainees.

Susana has special interest in the treatment and outcomes of bilateral cleft lip and palate and facial symmetry in craniosynostosis patients. She is the national auditor for the 5 and 10 years maxillary growth in bilateral cleft lip and palate. She also has a keen interest in research, having published and completed a PhD Thesis in Dental Anthropology.

Dr Zoe Edwards

Psychology in CLP patients

Following qualification in 2006, Zoe took up her current post as a Clinical Psychologist for Psychological Services (Paediatrics) at Alder Hey. She works with the North West England, The Isle of Man and North Wales Cleft Lip and Palate Network, as well as with the Moebius and Disorders of Sex Development (DSD/Intersex) multidisciplinary teams. She provides teaching to Trainee Clinical Psychologists on the topic of 'visible difference', and is currently collaborating with fellow members of the UK Cleft Psychology Clinical Excellence Network in service development and research in the area of transition.

Mr Andrew Barber

Fixed and removable prosthodontics in CLP

Since 2013, Andrew has been the lead Consultant for Restorative Dentistry for the East of England Regional Cleft Lip and Palate Service (Cleft Net East). He is based at Addenbrooke's Cambridge University Hospital where he works closely with the other members of the Cleft multidisciplinary team to provide specialist Restorative Dentistry for adolescents and adults with Cleft. Care provided includes Fixed, Removable and Implant supported prosthodontics to improve dental aesthetics and function and manage repaired or patent oro-nasal communications.

Andrew's consultant role also includes oral rehabilitation of patients affected by severe hypodontia and head and neck cancer. In private practice Andrew sees referrals for specialist prosthodontics and periodontics. He is the secretary of the UK Clinical Excellence Network (CEN) for Restorative Dentistry in Cleft.

Mr Sandip Popat

Speech appliances and speech therapy in CLP

Sandip qualified with a Bachelor in Dental Surgery (BDS) from University College London (UCL) in December 1991. He worked in general dental practice for seven years and then went onto further specialist training. He gained a Fellowship in Dental Surgery (FDS RCPS) from the Royal College of Physicians and Surgeons in Glasgow in 1998 and then undertook a three year full time specialist training programme in Fixed and Removable Prosthodontics at the Eastman Dental Institute in London.

In 2000, he gained a Masters in Clinical Dentistry (MClinDent) in fixed and removable Prosthodontics from UCL, London. In 2001 he was successful in the Membership examination (MRD RCS) and gained entry onto the GDC specialist list in Prosthodontics. Sandip continued further training and remained at the Eastman for a further four years to complete a Consultant in Restorative Dentistry training. He gained a further Fellowship (FDS (Rest Dent)) in 2004 and entry onto the GDC specialist lists of Restorative Dentistry, Endodontics and Periodontology.

In 2005, he was appointed to a new post as the first full-time Consultant in Restorative Dentistry at the John Radcliffe Hospital, Oxford. His main remit within the Hospital was to treat patients with cleft lip and palate, oral cancer, trauma and hypodontia.

Sandip has been involved in treating patients with cleft lip and palate for over twenty years and set up the Cleft Clinical Excellence Network of which he is currently the chair.

He is an examiner for the Royal College of Surgeons of England and is the Regional Specialty advisor for Restorative Dentistry. He is also BDA President for South Mercia Region.. Sandip has undertaken Medico-legal work for many years and in 2015, he completed the Bond Solon Expert Witness training.

Dr Ginette Phippen

Speech appliances and speech therapy in CLP

Ginette studied Clinical Language Sciences in Leeds and qualified as a Speech and Language Therapist in 1989. She gained a Doctorate in Clinical Practice from the University of Southampton in 2013 and has a postgraduate qualification in cleft palate speech. Ginette has worked as a speech and language therapist for over 27 years in a range of roles and settings, primarily within the NHS. Her current role is Regional Lead SLT for The Spires Cleft Centre, Oxford and Salisbury. Ginette also took on the Clinical Director role for the twin-site service in 2017.

The Lead SLT role is broad; incorporating specialist clinical work, team management and a significant commitment to research and audit, training and service development. Ginette is a member of the national forum for Lead SLTs in cleft, which oversees service delivery including the development of a national service specification for cleft care and national speech outcome standards. Recently she has co-authored a report highlighting inequities in community and specialist SLT provision for children with cleft across the UK.

Currently Ginette is working closely with a medical device company on the commercialisation of an innovative prosthetic treatment for nasal speech. This has reached an exciting stage with a licence agreement in place and patent pending. There is considerable clinical interest from across the UK, both from Cleft specialist SLTs and SLTs working with adults and children with motor speech disorders.

Professor Ian Needleman

Contemporary periodontics

Ian is Professor of Restorative Dentistry and Evidence-Informed Healthcare at UCL Eastman Dental Institute and Honorary Consultant in Periodontology with UCLH. He is a clinical specialist in periodontics at UCL and in specialist practice at PerioLondon. He also leads the Centre for Oral Health and Performance (www.ucl.ac.uk/cohp) which has been awarded

recognition by the International Olympic Committee as a research centre in collaboration with the Institute of Sport Exercise and Health and the National Centre for Sport and Exercise Medicine. His research has been awarded prizes by the European Federation of Periodontology, Royal Society of Medicine, German Periodontal Society, German Cochrane Centre and International Association for Dental Research. Ian was nominated as an inspiring teacher at UCL in 2007 and received the UCL Provost's Award for Leadership in Public Engagement in 2017. Ian was a member of the International Olympic Committee, Scientific Committee for the 2014 Conference on Prevention of Injury and Illness in Monaco.

Mr Peter Briggs

Trouble shooting failed restorations

Peter has been in specialist and hospital practice for many years. He was president of the BSSPD in 2014/5 and has represented the society, with others, at the BDA conference over the last few years. At present he is heavily involved with teaching and education with HEE with his portfolios covering Dental Foundation, Core and Specialty.

Professor Craig Barclay

Contemporary removable prosthodontics

Craig qualified BDS in 1986 from Glasgow, and took up his current NHS consultant post at Manchester in 2002. He is a Consultant in Restorative Dentistry and Honorary Professor in Maxillofacial Rehabilitation, Associate Dental Postgraduate Dean for Specialist Training, Director of Education for Manchester Dental Education Centre and Director of the Square Advanced Dental Care Centre.

He has published over 30 refereed papers, written three books and has lectured both nationally and internationally on head and neck cancer and dental implantology.

He is the clinical lead for Central Manchester in Oral Rehabilitation of Oral Oncology patients, and was one of the national assessors for the National Cancer visits in 2009.

He is the Chair of the National Recruitment Team for Restorative Dentistry, run by Health Education North West. He is currently Director of the MSc implant programme at the University of Manchester, Director of Education of Manchester Dental Education Centre (Mandec) and is a past President 2009-2010 for the British Society of Prosthodontics (BSSPD). He is the past chair of the Intercollegiate Speciality Fellowship Examination, and sat on the Council of the

Royal College of Physicians and Surgeons of Glasgow and is currently a MRD Examiner. He has won two NHS North West Innovation Awards in 2008 and 2009 and was awarded a MAHSC Chair in June 2014 in the field of Maxillofacial Rehabilitation.

Mr Mark Hunter

Contemporary endodontics

Mark qualified with a BDS from Manchester in 1979, was awarded an MSc in Endodontics in 1995 and was granted GDC specialist status in 2001. He currently works in Altrincham in private practice limited to endodontics.

He teaches on the postgraduate endodontic programme at Manchester University where he has been teaching since 1989. In addition he teaches for 'simplyendo', formerly based at the practice in Altrincham, but now based in a purpose-built endodontic teaching establishment in Formby.

Mark has been a member of the British Endodontic Society for over twenty five years, and has been an active member of the Committee, as assistant and full Secretary and is currently President Elect for 2019-20.

When not doing endodontics, Mark enjoys bee-keeping, tending pet chickens, as well as playing and listening to classical music and competitive running! A life full and richly diverse, blessed with a wife and three grown up children, all he wants is more hours in the day, and an unlimited life-time to enjoy these riches!'

Professor Alex Milosevic

Contemporary toothwear management

After hospital posts in Portsmouth and Liverpool Alex was appointed Lecturer in Restorative Dentistry at the University of Liverpool in 1981. During this period he gained the Fellowship in Dental Surgery from the Royal College of Surgeons of Edinburgh as well as the Diploma in Restorative Dentistry. This was followed by a PhD on the prevalence and risk factors for tooth wear and acid erosion in adolescents and in the eating disorders. In 1999 he was appointed Consultant at the Royal Liverpool Hospital, a post he held until 2016, when Alex was appointed Professor and Head of Prosthodontics at the new Mohammed Bin Rashid University in Dubai, UAE. Alex co-wrote the UK national guideline for tooth wear management and has over 70 publications. He still has significant responsibility as a specialty membership examiner and question bank manager and sits on the Dental Council at the RCS Ed. In May 2017, the BDA awarded life membership to him for services to the association and the profession.

Schottlander oral presentation abstracts

Primary vs Secondary Zygomatic Implant Placement In Head And Neck Cancer Patients - A 10 Year Prospective Study

Chris Butterworth

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Introduction: Zygomatic Implants provide excellent remote anchorage opportunities to support dental & facial prostheses in head & neck oncology patients following maxillary & mid-face resection and can be placed at primary surgery or a later date

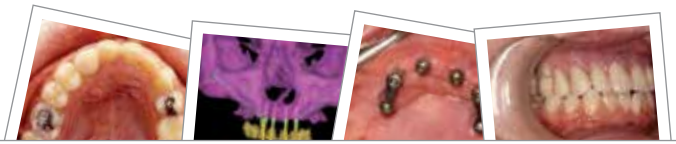
Method: The primary aim of this prospective study was to examine the survival of zygomatic (and modified zygomatic implants) used in the management of consecutive patients with maxillary & mid-face malignant disease in a high volume head & neck cancer centre. The secondary aim was to examine whether the placement of zygomatic implants at the time of primary cancer surgery carried any advantage in terms of implant survival and utilisation compared to placement at a secondary time-point following successful oncology treatment

Results: 53 patients received 140 zygomatic implants as part of their rehabilitative treatment for maxillary/ mid-facial disease.

4 patients died prior to restoration and their 9 implants were excluded from the analysis, leaving a study population of 49 patients with 131 zygomatic implants. 27 patients received primary placed implants at the time of tumour resection whereas 22 patients were treated secondarily.

The primary and secondary groups were fairly evenly matched in terms of gender, age with smoking (see table). The secondary group was disadvantaged in terms of radiotherapy with 36% of patients having been irradiated prior to surgery. 9 implants were removed from 4 patients, 5 within 3 months of placement, 2 within one year and 1 after 3 years of function. Primary placement cases demonstrated improved survival (96% v 89%) although this was not statistically significant at the implant (Fishers exact test p=0.17) or patient level (Fishers exact test p=0.31). All surviving implants were utilised and the overall prosthetic follow-up of our cohort was 24 + 20 months with the longest follow-up being 70 months. A small number of additional dental implants were used in each group demonstrating the reliance now placed on zygomatic implants with their excellent primary stability and robustness, even in high-risk situations.

Conclusion: The use of zygomatic implants in the management of oro-facial malignancy is a predictable prosthetic treatment modality to support complex oral and facial prostheses. The installation of implants at the time of primary tumour resection is advantageous and can result in high implant survival and useability.



A study comparing the fit surface accuracy of conventional and CAD-CAM milled acrylic denture bases

James Chesterman

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Objectives: This study aimed to compare the fit surface accuracy of dentures produced with digital CAD/CAM subtractive milling and conventional compression moulding techniques. Secondary outcomes were investigated including the effects of a secondary compression moulding process onto a CAD/CAM denture baseplate, and the accuracy of scanning edentulous impressions and dental stone casts.

Methods: A master maxillary and mandibular model was selected and scanned. Ten silicone impressions were recorded on each model and cast in dental stone. Models were scanned and used to construct CAD/CAM milled denture bases. Conventional dentures were constructed with a compression moulding technique onto these working models. On the milled baseplates, teeth were attached with a compression moulding technique. Fit surfaces of the impressions, working models and dentures were scanned at each stage and aligned to the master model. The mean unsigned differences between the scans and master model were calculated. The mean standard deviation results were used to determine the precision accuracy. The Mann-Whitney U test was performed to determine differences between milled and conventional dentures. The Wilcoxon signed rank test was performed to determine differences between impressions and dental models, and between milled baseplates and milled dentures following a secondary processing ($P<0.05$). Quality colour maps represent the visual assessment of the accuracy in areas of interest.

Results: The fit surface accuracy of conventional processing was significantly more accurate than CAD/CAM milling maxillary dentures following a secondary processing. Prior to a secondary processing, mandibular milled baseplates were more accurate than conventional dentures. Milled maxillary baseplates demonstrated the largest error in areas of undercut. Peripheral extensions were subject to varied accuracy following processing and finishing on both digital and conventional dentures. Scanning edentate impressions was significantly less accurate than scanning dental stone casts.

Conclusions: Secondary processing onto CAD/CAM milled denture bases introduces significant reduction in accuracy and therefore is not recommended. The polishing and finishing appears to introduce significant error at the periphery following compression moulding, which may be an underestimated source of clinical denture problems. A CAD/CAM production method to construct the entire baseplate offers greater accuracy over conventional processing in terms of peripheral extension and fit surface. The accuracy of scanned impressions appears to be influenced by the optical properties of the material, methods to secure them and areas of undercut. Further research on CAD/CAM dentures is warranted including clinical outcomes, cost-effectiveness and technical production methods such as rapid prototyping. In addition, the digital techniques to measure accuracy require clinical validation in removable prosthodontics.

The Top 10 Treatment and Management Uncertainties in Head and Neck Cancer - Results of an Head and Neck Priority Setting Project

Suresh Nayar*, Akhila Regunathan, Jana Rieger, Leah Lechelt

Institute of Reconstructive Sciences in Medicine, Edmonton, Canada
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Introduction: Head and neck cancer (HNC) is constantly evolving in its aetiology and epidemiology. Survival rates for head and neck cancer patients are improving; patients diagnosed with some types of HNCs are younger and living longer. The treatment and management of HNC patients should include the perspective and input of patients, caregivers/family members and clinicians treating these patients if we are to appropriately inform future research in this area. Research and published literature across many diseases and domains predominantly reflects the treatment priorities and interests of industry and researchers. The priorities of patients and caregivers are often under-represented in the literature. The aim of this project was to determine the top 10 treatment and management uncertainties in head and neck cancer from the perspective of patients, family members, caregivers and clinicians.

Methodology: A mixed methods approach modelled after the James Lind Alliance methodology for collaborative Priority Setting Partnerships was used. The James Lind Alliance (JLA) is an initiative to establish and develop research Priority Setting Partnerships (PSPs) of patients, families and clinicians to inform treatment research agendas. To identify uncertainties in HNC treatment and management, a survey was designed and sent to patients, caregivers/family members and clinicians. These uncertainties were then organized into themes and ranked by the HNC Priority Setting Project Steering Committee comprised of patients, caregivers/family members and clinicians/researchers and 50 other stakeholders, bringing the uncertainties from 818 to 77, and then again ranked to a short list of 27. This short list was then finalized at an all-day workshop where participants reached consensus on the top 10 research priorities for HNC.

Results: These top 10 priorities included research questions on prevention, screening, treatment and quality of life. Seven of the top 10 uncertainties relate to treatment planning, efficacy and outcomes, reflecting both historical and persistent concerns from patients and clinicians about the lack of strong evidence on treatment efficacy and outcomes associated with various single and combination treatment regimens, while minimizing undesirable treatment outcomes.

Conclusions: The Head and Neck Cancer Priority Setting Partnership project offered important insights into the priorities of patients, families and clinicians, and underscores the need for continued research into the distilled Top 10 treatment and management questions raised by respondents. These findings may be useful to researchers, clinicians and patient advocacy organizations globally to identify questions worthy of priority research and funding. Perhaps similar projects need to be carried out at other regional levels to ascertain the priorities of patients, families and clinicians.

Bone grafting needs for hypodontia patients undergoing dental implant treatment at a UK dental hospital.

Ioannis Papadopoulos*, Shakeel Shahdad

Royal London Dental Hospital
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Introduction: The prevalence of hypodontia in the British population is estimated at 3.5-6% and is a priority group for implant treatment under the NHS requiring a multidisciplinary approach. Due to the nature of the condition, alveolar ridge often has significantly reduced volume which necessitates bone augmentation either simultaneously during implant placement (sGBR) or, as a block graft using two-stage approach. Alternatively, narrower diameter or shorter implants can avoid or at least reduce the need for more invasive bone grafts.

Aim: The primary aim of this study was to identify the percentage of hypodontia patients requiring bone augmentation for replacement of missing teeth with implants in a large tertiary referral centre. The secondary aim was to identify the types of bone grafting procedures and types of implants (diameter and length).

Materials and Methods: Patients that received dental implant treatment at the Royal London Dental Hospital between 2011 to 2015 were included in the study. They had to be aged 17 or above, received implants for replacing congenitally missing teeth, and had all the necessary information in their clinical notes. The clinical records were searched and data recorded for details of missing teeth, sites and types of implants placed, and the timing and type of any bone graft procedures.

Results: Fifty-three patients with 117 dental implants fulfilled the inclusion criteria. 55% of the implants (n=64) replaced anterior and 45% (n=53) replaced posterior teeth.

- 62% (n=33) of patients had bone grafting; with 11% having a block graft, and 51% sGBR using deproteinized bovine bone and porcine collagen membrane.
- At the implant level, 65% (n=77) were placed with bone grafting; 10% with a block graft and 55% with sGBR.
- 70% of the anterior implants (n=45) were placed with sGBR and 19% (n=12) after a block graft. All the block grafts were carried out in the mandibular anterior area.
- 38% of the posterior implants (n=20) were placed with sGBR and none needed a block graft. 72% of the posterior implants (n=38) had a diameter greater than 3.3mm. Out of these, 55% were placed with sGBR. 3.3mm diameter implants replaced 28% (n=15) of posterior teeth and 13% of which were placed with sGBR.
- 29% of the maxillary posterior implants were 8mm in length and 71% were 10mm in length. 16.5% of the maxillary posterior teeth were placed with sinus augmentation & sGBR.

Conclusions: Within the limitation of this study, it can be concluded that in hypodontia patients the majority of implants, especially in the anterior region will require augmentation. Less invasive implants seem to reduce bone grafting needs.

Schottlander poster presentation abstracts

Trismus in Head and Neck Cancer patients: A survey to improve its management.

O Aiyegbusi*, R Hewittson, K Anjum and M Ranka Code **SP01**

Royal Preston Hospital
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Introduction

Trismus refers to restricted mouth opening of any aetiology. This significant complication seen in in Head and Neck Cancer (HANC) patients has an incidence of 5 to 38% and a widely accepted definition of mouth opening (MO) ranging from 18 to 35mm. Trismus compromises the overall ability to treat HANC patients and affects their quality of life (QOL).

Tips:

- Normal MO: 2 fingers' breadth (40mm) upto 3 fingers' breadth (55mm)
- Clinicians should record MO prior to surgery/ radiotherapy and following treatment
- Exercise caution in patients on peg-feed/ liquid diet, as trismus may not be evident until normal oral intake is introduced

Risk factors for trismus induction in oncology patients

Surgery:

- Large tumour size (T3/T4)
- Local invasion of tumour adjacent/ muscles of mastication
- Surgery in area of TMJ/ pterygoid muscles
- Fracture of mandible, failure of material used for reconstruction
- Post-surgical inflammation and scarring

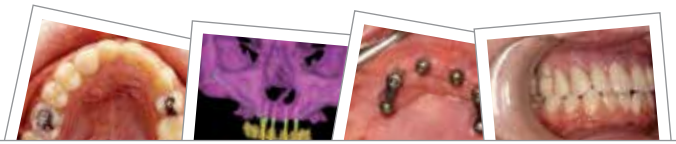
Radiotherapy:

- Radiation dose greater than 60Gy
- Chemoradiotherapy
- TMJ and pterygoid muscles exposed during radiation
- Patients genetically predisposed to fibrosis (TGFB1)

Implications of Trismus

For patients: difficulty maintaining oral hygiene, tolerating denture prosthesis especially obturators, speech and mastication problems, pain and restriction in daily tasks

For clinicians: limited access for dental treatment, tumour surveillance and denture construction. Extractions under General Anaesthetic may be indicated in severe trismus. Endodontic treatment can be challenging and risk of osteroradionecrosis is increased with extractions. In an emergency situation, severe trismus may compromise the ability to secure an airway.



Survey: A survey was carried out at Royal Preston Hospital (January 2018) to evaluate the current level of trismus awareness and improve its management amongst HANC multidisciplinary team members. The objective was to provide recommendations to clinicians for further education and prepare a patient information leaflet (PIL) highlighting prevention strategies and treatment options for trismus.

Results:

- 21 out of 23 questionnaires were completed, giving a response rate of 91%
- 100% of respondents thought trismus affected the management of their patients and impacted the daily tasks and QOL of their patients
- 90% referred patients to Restorative/ Speech and Language therapy/ Oral and Maxillofacial Surgery department for treatment
- 88% were aware of trismus risk factors
- Majority of respondents were not aware (67%) or were unsure (19%) of local or national guidelines for trismus management
- 90% of respondents agreed that jaw exercises helped improve trismus and 43% had a preferred appliance for treating trismus
- 57% of respondents felt Therabite was not readily available to patients and 38% were unsure
- Only 52% of respondents thought trismus was reversible

Conclusion: The survey showed management of trismus in HANC patients was variable depending on awareness, knowledge, training and previous clinical experiences. Due to respondent anonymity, it was difficult to draw conclusions about individual specialties and in future surveys the sample size could be increased.

Trismus can be reversible in most cases. Consequently, it is important to ensure prevention and early intervention strategies are implemented. The survey contributed to the development of PIL, clinical recommendations for staff and improvement of multidisciplinary management of trismus.

Influence of smoking on the failure rate of dental endosseous implants: A clinical Study

Bader K AlZarea

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Background: The use and remarkable success of endosseous implants has led to an interest in identifying the factors associated with implant failure. The aim of the present study was to evaluate the influence of smoking on the failure rate of dental endosseous implants.

Methods: The present study included 146 patients (smokers and non smokers) with a total of 352 implants. The study included 89 males and 55 females. Statistical analysis was done using Z-proportionality test and Chi-square test. The statistical significance was set at 5% level of significance ($p<0.05$).

Results: Out of a total of 352 implants, males (73.58%) had higher implants as compared to females (26.42%). The failure rate in smokers was 41.83 % and in non smokers was 24.01%. Twenty four (48.97%) of the smokers with <10 years of duration had implant failures and 25 (51.03%) of smokers with >10 years of duration had implant failures as compared to 61 (24.01%) of non-smokers who had implant failures. This difference was statistically significant (p=0.0001). Statistically significant difference was also observed in the association between the number of packets of cigarettes smoked with non smokers (p=0.0001). Higher implant failures were observed in the posterior mandible (61.2%) and in implants with length <10mm (77.5%) in smokers.

Conclusion: Even though smoking has not been contraindicated with dental implants but the findings of the present study suggest that it has a significant effect on survival of implants. A protocol for cessation of smoking around the time of surgery should be advocated along with awareness to the patients about the adverse effects of smoking.

Keywords: Implant; endosseous; smoking; failure.

Dental implants in diabetic and non diabetic patients: A comparative clinical study

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Aim: To investigate the clinical results of dental implants in diabetic and non diabetic patients

Methods: Twenty one diabetic individuals and 110 non-diabetic individuals treated with dental implants at the College of Dentistry, AlJouf University, Kingdom of Saudi Arabia during the period of January 2013 to June 2015 were analyzed. Age, gender, implant, location, length and survival were recorded in all the participants

Results: Out of 115 implants in diabetics and 377 implants placed in non-diabetics, a total of 26 (22.60%) implants were failed in diabetic patients and 58 (15.38%) implants were failed in non diabetics respectively. When the failure rate was analyzed by location, 19.23% and 18.96% of implant failures were seen in anterior maxilla in diabetics as compared to 18.96% of implant failures seen in non-diabetics and 23.07% of implant failures were seen in posterior maxilla in diabetics as compared to 2.41% of implant failures in non-diabetics. Similarly, 26.92% and 24.13% of implant failures were seen in anterior mandible in diabetics and non-diabetics respectively. In diabetics, 30.76% of implant failures were seen in posterior mandible as compared to 34.48% of implant failures seen in non-diabetics. The length of the implants had no effect on the success rate of implants.

Conclusion: Diabetic individuals undergoing dental implant therapy do not encounter a higher failure rate than the normal population.

Keywords: Diabetes mellitus, dental implants, implant prosthesis

The Modified Manchester Bite Block - A Contemporary Jaw Registration Technique

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The “Manchester Bite Block” is a modified lower occlusal rim that can be used in the jaw registration stage of complete denture construction. First described by McCord and Grant 2000, the “Manchester Bite Block” has two pillars of wax situated bilaterally in the region of the mandibular second premolar-first molar tooth positions. When these two pillars contact evenly at the selected occlusal vertical dimension (OVD), the rims can be sealed with a suitable registration medium. This method provides control over the OVD, and ensures a stable relationship between the bases and the underlying tissues. It also provides a retruded contact position (RCP) record that can be easily returned to the mouth to verify its accuracy. Further modification to the “Manchester Bite Block” can be made with the addition of poly-vinyl siloxane (PVS) putty attached to the anterior aspect of the rim. This allows the clinician to record a functional registration of the space, in which the anterior polished surfaces of the denture will occupy. Outlining this space to the technician has the advantage of guiding them to the position of the lower anterior teeth. This addition is analogous to a neutral zone registration but with the further benefit that it can be completed in the same visit as the remainder of the jaw registration.

The aim of this presentation is to introduce clinicians to a simplified technique in recording jaw registration for complete denture construction and to highlight the advantages of this technique through the illustration of cases.

A comparative audit in the failure rate between traditional fabricated and CAD/CAM designed and selective laser sintering (SLS) manufactured Co/Cr frames at the Cardiff University Dental Hospital

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Introduction: The University Dental Hospital of Cardiff (UDH), is the first teaching hospital in the UK that utilises CAD/CAM and SLS metal manufacturing technology for various applications in dental and medical specialties. The aim of this audit will focus on the utilisation of the CAD/CAM and SLS manufacturing system for the fabrication of Co/Cr frames, to compare the results of the remake rate between the two techniques and discuss the use of the system in comparison with traditional methods of fabrication.

Materials and Methods: Electronic and manual searches in the University Hospital patients’ and laboratory databases were performed and the data for all the CO/Cr frames was collected and analysed for the period between January 2016- January 2017. It was followed by an assessment of the use of the CAD/CAM system and an analysis of the Co/Cr frame remakes was performed.

Results: A total of 278 Co/Cr frames were fabricated during the period between January 2016- January 2017: 214 Co/Cr frames fabricated by traditional methods, and 64 by CAD/CAM and SLS manufacturing. 30 frames had to be repeated with the following breakdown: 26 of traditional techniques and 4 of the CAD/CAM system. Main reasons of remake for the traditional groups were clinical error: secondary impression error (n=8), clinical design error (n=6), no satisfactory retention (n=5), other reasons (n= 5); no reason given in 3 cases. For the CAD/CAM group, secondary impression, clinical error and no satisfactory retention contributed equally to the remakes (n=1). No reason given in one case. Failures attributed directly to technical factors (e.g. fractures) were not identified to both groups. Direct comparison of both groups wasn't possible because of the heterogeneity of results.

Conclusion: The current data indicate that CAD/CAM and SLS manufacturing of Co/Cr frames showed similar reliability with the traditional techniques of fabrication. Clinical errors are the main reason of remakes in both groups. Further to this, the review revealed certain advantages of the CAD/CAM and SLS service when compared with the regular service. The UDH is benefited from the use of the CAD/CAM system, having a lower cost per frame and less material waste. CAD/CAM is less costly and time efficient; on average, a technician saves 4 hours by the use of the CAD/CAM system when compared with the traditional techniques. The clinician can have better control during the stage of the design. It also allows the replication and trial of the designs. However, the initial cost of the technology is high and requires tech savvy technicians that are willing to go beyond the traditional ways of fabrication.

Assessing the causal association between 25-hydroxyvitamin D and the risk of oral and oropharyngeal cancer

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Background: Oral and pharyngeal cancer patients require extensive prosthodontic dental treatment to restore functionality. Even with specialist treatment, function and aesthetics rarely return to those pre-cancer diagnosis and prevention and early diagnosis of these cancers remains the most effective way to reduce the burden of these diseases. Circulating 25-hydroxyvitamin D (25OHD) may reduce the risk of oral and pharyngeal cancers. The most recent well-powered prospective study reported a strong protective effect in a European population. The evidence is inconsistent however, and this may reflect the influence of bias and confounding. The availability of genetic variants, uncorrelated with known confounders, but predictive of 25OHD and genetic data in a large oral and oropharyngeal cancer collaboration aids causal inference when assessing this association. This study aims to assess the causal association between vitamin D and oral and oropharyngeal cancer risk and estimate the size of any effect using Mendelian randomization.

Methods: 5,133 oral and pharyngeal cancer cases and 5,984 matched controls with genome wide genetic data were included in the study. Participants were based in Europe, North America and South America and were part of the Genetic Associations and Mechanisms in Oncology (GAME-ON) Network. Five genetic variants reliably associated with circulating 25OHD were used to create a relative genetic measure of 25OHD. In the absence of measured 25OHD, two-sample Mendelian randomization

using individual level outcome data was used to estimate causal odds ratios (OR) for cancer case status per standard deviation increase in log25OHD. Analyses were replicated in an independent population based cohort (UK Biobank).

Results: In a meta-analysis of the two studies (GAME-ON, UK Biobank) there was little evidence of a causal association with oral cancer (OR=0.86 [0.70;1.07], *p*=0.18), oropharyngeal cancer (OR=1.03 [0.69;1.53], *p*=0.87) or when sites were combined (OR=0.95 [0.74;1.22], *p*=0.68). Primary and replication results were similar.

Conclusions: This study suggests 25OHD is unlikely to be causally associated with pharyngeal cancer risk and if a causal association exists with oral cancer, it is likely to be smaller than that identified by observational methods.

The number of referred cleft lip and/or palate patients who have access to the multi-disciplinary cleft team in the West Midlands and an analysis of their treatment needs

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The holistic management of patients with cleft lip and/or palate (CLP) is dependent on the access of this patient cohort to the multi-disciplinary teams (MDTs) within each region. Since the year 2000 patients born with a cleft diagnosis should have access to MDT as part of their patient pathway. Patients who have not benefited from this often require more extensive prosthodontic management and may benefit from interdisciplinary care. An evaluation of our service was undertaken to improve access, promote harmonious care between healthcare professionals and utilise finite resources to maximise patient outcomes.

Aim: To determine the number of referred patients at Birmingham Dental Hospital (BDH) who have access to the multi-disciplinary CLP team in the West Midlands. This was expanded to provide a detailed overview of how the age and diagnosis affected the time and type of prosthodontic treatment.

Introduction: Congenital craniofacial abnormalities are among the most common of all birth defects and may contribute to an array of difficulties for an individual. These range from speech, psychological, hearing to appearance. Children born with CLP typically have an increased morbidity compared with unaffected individuals. The complex nature of the abnormality means patients require multi-disciplinary care throughout their lives.

The West Midlands cleft service is a MDT consisting of a range of healthcare professionals across different specialties. The Department of Restorative dentistry is based away from the remaining cleft MDT and receives referrals for the dental assessment and rehabilitation of cleft patients from a variety of sources ranging from General Dental Practitioners, the cleft MDT, General Practitioners, self-referrals to other health care professionals. The assigned restorative cleft lead liaises with other members of the MDT to provide holistic management of this patient cohort. Patients with CLP may also present to other departments and clinicians within the Department of Restorative Dentistry at BDH and therefore may not have direct access to the MDT service.

Data collection: A search was conducted of all R4 notes which produced a list of patients. The notes for each patient were then accessed and data extraction performed in a secure data collection sheet. 128 patient records (n=128) were searched including previous paper notes, R4 notes, radiographs and clinical illustrations by two separate operators.

Discussion and conclusion: The access of patients to the MDT seen at BDH was recorded at 94.53%. The 6 patients which did not have access to the MDT were referred to other departments; mainly to construct replacement obturators. These patients had an average age of 55 and were therefore an older cohort group and had a more extensive cleft defect. These individuals may benefit from interdisciplinary care which would not have been present during the time of development. The age and severity of diagnoses had a positive relationship with appointment number and prosthodontic solution. The findings allowed us to streamline treatment within the hospital.

Mind the gap: fixed prosthodontic considerations for hypodontia patients with orthodontically closed midline diastemas

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The replacement of congenitally missing maxillary lateral incisors for patients who have completed orthodontic closure of midline diastemas may pose difficulties for the prosthetic management using resin bonded bridges. Consideration has to be made for retention of the newly achieved tooth position and prosthesis whilst maximising the aesthetic results and function of the restoration. This presentation provides an overview of the prosthetic designs which can be used to replace missing units whilst maintaining tooth position and providing orthodontic retention.

Aim: To discuss the approaches for maximising aesthetic and functional outcomes of resin bonded bridge restorations in hypodontia cases and consideration of post-orthodontic tooth movement, retention and bonding.

Background: The management for the replacement of congenitally missing maxillary lateral incisors is well discussed in the literature, yet each case presents unique challenges. Following orthodontic tooth alignment, the prosthodontics management needs to consider retention and prevention of relapse in the planning of the final tooth restoration. Options for tooth replacement may include removable or fixed prosthodontics, with or without implant support. The presented case demonstrates the difficulties faced when the midline diastema remains following orthodontic treatment, where implant supported prostheses are contraindicated. Various resin bonded bridge designs and their relative merits are illustrated and discussed.

Discussion: The treatment challenges in managing hypodontia cases with are demonstrated and the relative merits of each are discussed. Resin bonded bridges remain an option for replacing congentially missing maxillary lateral incisors where there are contraindications for implant-supported prostheses. In cases where a midline diastema has been closed with orthodontics, the timing of prosthesis provision needs to be precisely planned within the combined orthodontic-restorative team.

Consideration has to be made for retention of the diastema following orthodontics, in addition to the prevention of potential canine de-rotation and compromised aesthetics. Examples of orthodontic retention features incorporated into the resin bonded bridge design are illustrated. Patient preferences, aesthetics, materials, bonding and interocclusal relationships can influence the final design of the resin bonded bridge restoration. The management of incomplete orthodontics and re-opened midline diastema can prove challenging when designing resin bonded bridges and solutions to these problems are demonstrated.

Conclusion: Resin bonded bridges remain a favourable treatment option for replacing missing maxillary lateral incisors in an unrestored dentition. When orthodontic challenges are faced, the design of the prosthesis can aid in the retention of realigned teeth, as well as providing excellent aesthetic and functional results. Consideration should be given to variations in the retainer design to construct acceptable restorations for their patients.

Prosthetic Rehabilitation of a Patient with X-Linked Hypophosphatemia using Dental Implants: A Case Report and Review of the Literature

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X-Linked hypophosphatemia is an uncommon genetic disorder characterised by a mutation of the PHEX gene and resulting in low blood phosphate levels due to excessive urinary excretion. Symptoms can include bone pain, skeletal deformities and osteoarthritis as well as dental problems. Patients may present with delayed eruption, enamel hypoplasia, enlarged pulp chambers and taurodontism. Although caries rates are higher in patient with X-Linked hypophosphatemia, spontaneous loss of vitality and abscess formation is common and thought to be a result of abnormal dentine mineralisation.

Rehabilitation of patients who may have lost a significant number of teeth at a young age is essential to their quality of life and fixed restorations, which may need to be supported by dental implants, are likely to be desirable. Little is known of how X-Linked hypophosphatemia may affect the osseointegration of dental implants and even less is known about the long-term success of dental implant supported restorations in this patient group. There is very little evidence on which to base treatment decision with only a handful of case reports available in the literature

The case being reported is of a patient diagnosed with X-Linked hypophosphatemia who has had 5 dental implants placed, 3 single implant supported crowns and 1 implant supported bridge. The first implants were placed over 10 years ago and the treatment completed, clinical and radiographic follow-up is described.

To assess the adequacy of information provided by referrers for pre-radiotherapy dental assessment of head and neck cancer patients

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Introduction: Patients who undergo radiotherapy for treatment of head and neck cancer are at an increased risk of osteo-radionecrosis. The aim of pre-radiotherapy dental assessment is to ensure that the patient's oral health is at an optimum level and that any teeth of a poor long term prognosis are removed at least two weeks prior to commencing radio therapy.

Aims & objectives:

- To identify missing information on referral letters for pre radiotherapy assessment
- To develop a referral proforma for surgeons to use in order to refer patients' with sufficient information regarding their oncology diagnosis and treatment

Standard: There are no national guidelines at present so a departmental standard was developed.

100% of patients referred to Birmingham Dental Hospital for pre-radiotherapy dental assessment should have the following information on their referral letter:

1 Diagnosis
2 TNM staging
3 Treatment planned
4 Radiotherapy field, intended dose and intended start date
5 Nature of treatment: palliative vs curative?

Method: The audit included all the patients referred to the Birmingham Dental Hospital for a pre-radiotherapy dental assessment for head and neck cancer between the months of October 2016- March 2017. The patient records were accessed through the dental software system 'Carestream –R4'.

Between October 2016 and March 2017, 90 new patients were identified who were referred for pre-radiotherapy dental assessments to BDH. Of these patients, 74 were male and 16 were female.

When looking at whether the referral letter included the diagnosis, 100% (n=90) had stated the diagnosis.

When looking at whether the referral letter included the TNM staging, only 53% (n=48) had stated the TNM staging, whilst the remaining 47% (n=42) had not.

When looking at whether the referral letter included the proposed treatment plan, 88% (n=88) had included the proposed treatment plan whilst 2% (n=2) had not. Of the 88 referrals that has stated a treatment plan, 59% (n=52) were planned to undergo radiotherapy, 35% (n=31) were planned to undergo chemo-radiotherapy and the remaining 6% (n=5) were planned to undergo a combination surgery and radiotherapy.

The field of radiotherapy was stated in 51% (n=46) of referral letters and 49% (n=44) did not. The intended dose of radiotherapy was stated in only 8% (n=7) of

referral letters, whilst the remaining 92% (n=83) did not. In this audit, the intended radiotherapy start date was stated in only 2% (n=2) of referral letters, whilst 88% (n=88) no dates were given.

Only 23% (n=21) stated whether treatment would be palliative or curative, whilst 77% (n=69) did not state this information. Of the 21 letters, 10% (n=2) was planned to be palliative whilst 90% (n=19) was curative.

Conclusion: We fell short of our target standard in all areas except recording of the diagnosis.

Recommendations:

- To develop a proforma for all tertiary referral centres to use as guidance on information that should be recorded within a patients referral letter to oncology clinic, for pre radio therapy dental asessment
- Re audit to be undertaken 6 months after the proforma has been in place

Is hypodontia a feature of Gorlin Goltz Syndrome? A case report with known familial inheritance

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Background: Gorlin Goltz syndrome is an autosomal dominant inherited condition. The major characteristics are basal cell carcinomas, odontogenic keratocysts, palmar pits and skeletal abnormalities. Alongside these are a range of minor features including dental abnormalities. It is uncommon, but affects Caucasian males and females equally. Mutation in the tumour suppressor gene, PTCH, is thought to be responsible. Variable mutations can occur resulting in an unpredictable phenotype. The condition is difficult to diagnose in childhood as the symptoms appear gradually, however early diagnosis provides the opportunity for effective multidisciplinary management.

Case description: We present a 12 year old girl, referred to the Oral and Maxillofacial Department at Worcestershire Royal Hospital by her Orthodontist, following an incidental radiographic finding observed during a routine orthodontic assessment. The OPG radiograph revealed a well defined, multilocular radiolucency involving the left angle and the ascending ramus with marked displacement of the lower left 3rd molar crypt. There was no associated swelling, pain or paraesthesia. Histopathology confirmed an odontogenic keratocyst. Other features present on examination were, frontal bossing and facial asymmetry. There was evidence of hypodontia, with missing upper right and left lateral incisors (UR2, UL2) and a missing upper right 2nd premolar (UR5). There was irregular spacing in both the maxillary and mandibular arches. Her mother had a confirmed diagnosis of Gorlin Goltz syndrome, with evidence of palmer pits. The confirmed familial trait and features described led to the diagnosis of Gorlin Goltz syndrome.

Early detection of this condition through the pathology detected in the oral and maxillofacial region has enabled instigation of a multidisciplinary team approach, ensuring other medical specialities are aware and can monitor for other characteristics that remain undiagnosed. This case highlights the importance for dental professionals

to have awareness of this relatively rare syndrome in the younger age group. Gorlin Goltz syndrome is certainly not one of the most commonly recognised syndromes to be associated with hypodontia and therefore a knowledge of other presenting features can aid with early diagnosis and appropriate management.

Failing conventional bridgework - A Case Report

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Introduction: Conventional bridgework has decreased in its popularity in certain situations after the improvement in conservative and minimally destructive dentistry techniques, such as the use of resin bonded bridgework.

We are now seeing an age group of patients whose dental prostheses are failing and in need of replacement. This is largely contributed to both poor patient compliance with oral hygiene and diet measures, but also incorrect indirect restoration planning and provision, leading to premature restoration failure.

Evidence concludes that 19% of crown and bridge abutments lose vitality within 5 years, therefore it not only the supragingival aspect of the preparation that we should be concerned with, but also the risk to the endodontic status of the tooth with unnecessary or heavy preparations.

Background and Methods: A 49 year old woman presented with history of recurrent pain and swelling from the upper left quadrant and edentulous spaces in the upper arch. There was the presence of a failing 3 unit fixed double abutment bridge on the UL2-UL4, and 3 unit fixed fixed bridge from the UR4-UR2 which had been in situ for around 15 years. Periapical pathology and de bonding of the distal abutment retainer was seen on the UL4, alongside periapical pathology on the UR2 and UL3.

Discussions and treatment planning with the patient were made to manage her failing bridgework and ensure correct management, predictable outcomes and longevity.

Results: The UL4 was deemed unrestorable due to the classic presentation of debonding of the distal abutment tooth, subsequent caries and history of apical abscesses. This was extracted following sectioning of the distal retainer.

After an initial stabilisation phase was completed, options for replacement of this tooth and other edentulous spaces were given, which included no treatment, resin bonded bridges, conventional replacement bridges, implant prostheses or removable partial denture. Due to financial constraints and the number of lost teeth, the patient decided on the provision of a removable upper cobalt chrome denture with single unit crowns incorporating guide planes and rest seats to also replace the failed fixed fixed bridge in the upper right quadrant (bridges were sectioned). Root canal treatment was also performed on the non vital UR2 and referral for specialist RCT intervention on the UL3.

Conclusions: Revision on the correct design and use of conventional bridges must be adopted by all dental practitioners. Evidence based dentistry has now disregarded the use of double abutment bridges, and use of the least destructive approaches to a failing dentition and patient education can improve outcome and prevent irreversible damage to surrounding teeth.

A Modified Dahl Approach for the Treatment of Combined Tooth Surface Loss

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Aim: To outline an alternative technique to treat localised anterior tooth surface loss that overcomes some of the challenges presented by traditional approaches.

Background: The Dahl approach has been a well recognised way of treating localised anterior tooth surface loss since the mid 1970's. Originally, a removable anterior bite platform was used to create space between the anterior teeth, but since then techniques have evolved into using fixed restorations placed in supraocclusion. These have included full coverage crowns, metal palatal backings and more recently with the advances in adhesive dentistry, direct composite. By a combination of overeruption of the posterior teeth, and slight intrusion of anterior teeth, occlusal contacts are reestablished.

However, each of these techniques has its own limitations whether it be the destructive nature of full coverage restorations, the challenging aesthetics with metal palatal backings or the difficulties in controlling the occlusion with direct composite.

Discussion: The technique outlined involves the cementation of indirect composite palatal veneers at an increased vertical dimension. Direct composite is then layered on the buccal surface of the tooth to blend the margins and create ideal aesthetics.

By utilising indirect composite palatal veneers, we can recreate an ideal occlusion that needs minimal adjustment. The pre-cured composite has excellent physical and aesthetic properties and the direct composite can be manipulated as the clinician wishes.

Conclusion: This alternative approach in treating localised anterior tooth surface loss uses the different properties of composite to maximise the advantages of each. The technique offers a different modality that can be used by clinicians to treat cases of tooth surface loss in a minimally invasive way that offers excellent aesthetics and ease in controlling the occlusion.

Management of a patient with Amelogenesis Imperfecta utilising indirect restorations: a case report

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Introduction: Amelogenesis Imperfecta (AI) is an inherited condition, which commonly affects tooth development. It describes a group of conditions that can occur in isolation or as part of syndromes; affecting extra-oral tissues. The aetiology of AI is attributed to mutations or alterations of gene expression. Literature reports variable populational prevalence of AI with studies quoting the average global prevalence as less than 0.5%.

AI has multiple classifications and generally causes structural and clinical abnormalities in the enamel of both the primary and secondary dentition. Patients present with various clinical features dependent on the subgroup. Common clinical features are tooth agenesis, sensitivity, brittle teeth, gingivitis/periodontitis, hypomineralisation, hypoplasia and discolouration. Skeletal abnormalities and malocclusions are also common.

A thorough history and examination is important to aid the correct diagnosis and treatment, as the clinical appearance of AI presents with similar features to other disorders of enamel (e.g fluorosis or molar-incisor hypomineralisation).

These patients often require multi-disciplinary input from a young age and the aim of any restorative treatment is to aid prevention and stabilisation of the dentition.

Aims and objectives:

- To present a case highlighting the need for thorough treatment planning and multidisciplinary input of a patient with AI
- To present one method of management of AI, utilising indirect restorations

Case: A young male patient with AI was referred to the Restorative Department by the Paediatric team, who had been managing the patient's dental care for several years. The patient's main concern was a history of repeated failure of the restorations and sensitivity.

On examination, enamel hypoplasia was noted and all premolars and molars were restored with direct composite onlays, except for the UR6/UL6; which had full coverage gold crowns. Secondary caries and fractured restorations was evident clinically and radiographically. A Class 1 incisor relationship was noted with a large anterior open bite (AOB).

The treatment proposed was planned thoroughly using articulated study models, to replace the failing restorations, with indirect posterior restorations. The patient was not concerned regarding the AOB and declined Orthodontics prior to commencing the Restorative phase of the treatment.

He was initially referred to our Dental Hygiene and Therapy colleagues for stabilisation of periodontal health and improvement in compliance. We then placed minimal preparation gold onlays over the UR456, UL457, LR457, LL457 and emax onlays over the LR4 and LL4, which were in the aesthetic zone. These were undertaken as part of a staged treatment plan, with multiple try-in and provisional cementation visits; to ensure control of the occlusion and a minimal increase of the pre-existing open bite.

Overall the, patient was satisfied with the functional and aesthetic outcome.

Conclusion: This case highlights one method of restoring hypoplastic teeth in a conservative and controlled way. It demonstrates the importance of meticulous planning and provisional try-in appointments to ensure satisfactory clinical, technical and patient outcomes.

Management of Tetracycline staining and its sequelae

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Tetracyclines are broad-spectrum antibiotics that were introduced commercially in the 1950s to treat many common infections in children and adults. One of the side effects of these drugs is their incorporation into calcifying tissues at the time of their administration. The administration of tetracyclines to pregnant women or children under the age of 8 years old can result in discolouration of primary and adult teeth. The discolouration is permanent, and varies from yellow or gray to brown and is dependent on the dose, length of treatment or exposure, stage of tooth mineralization and degree of activity of the mineralization process. The prevalence of tetracycline staining is 3-4%, and currently the use of tetracyclines is contraindicated in pregnancy and young children, limiting the problem of tetracycline stained teeth to older adults. The appearance of tetracycline staining can have a profound effect on patients' confidence and lives.

A 52 year-old male was referred to the Royal Liverpool University Dental Hospital with aesthetic concerns due to his failing veneers. History and examination revealed a tetracycline-stained dentition, with heavily restored anterior teeth and multiple failing porcelain veneers. The failed restorations were replaced with a combination of Metal Ceramic Crowns and replacement veneers, with a good functional and aesthetic outcome. The poster highlights the challenges of treating patients with tetracycline staining including the dental anxiety often felt due to embarrassment related to their dentition, technical challenges and the difficulties in managing failing restorative work in this ageing cohort.

To Eat or Not To Eat: An Investigation into the Oral Health Advice given to Head and Neck Oncology Patients Prior to Radiotherapy in the Hull and East Yorkshire (HEY) Trust.

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Introduction: Head and neck oncology patients requiring radiotherapy in the HEY Trust, are referred to the Department of Restorative Dentistry for assessment. As advised by 2012 Royal College of Surgeons of England Guidelines on "Oral Management of Oncology Patients Requiring Radiotherapy, Chemotherapy and Bone Marrow Transplantation" the assessment aims to ensure patients are dentally fit prior to radiotherapy and have the knowledge to obtain optimum oral health during and after radiotherapy.

During the assessment patients are provided with oral hygiene instructions and diet advice, which are in line with the recommendations in the 2012 Royal College of Surgeons of England Guidelines. To achieve dental health, arrangements are made for them to see the staff hygienist, oral and maxillofacial surgeons and their general dental practitioner (GDP). The patients are reviewed 3 months post-radiotherapy for reinforcement of the oral health advice. There is no previous work in the HEY Trust investigating the retention of oral health advice.

Objectives: This study aims to test the retention of the knowledge patients receive at the pre-radiotherapy dental assessment and their compliance with the advice.

Method: The study reviews 30 head and neck patients who required a pre-radiotherapy dental assessment and attended the 3 month post radiotherapy review between October 2016-January 2017. A questionnaire with mostly closed questions on 10 separate oral health topics was designed. Patients were asked to complete this questionnaire on arrival for their 3 month follow-up, prior to the appointment.

Results: There was a large variance in patients' knowledge of the oral health advice they had received. On the whole, patients had good knowledge of the oral hygiene instructions they had received; the frequency of brushing, which toothpaste to use and to use mouthwash. Their knowledge on diet advice was weaker. For example, 75% thought that it was appropriate to eat and drink within half an hour of brushing and 67% were unaware that cariogenic foods, such as desserts, should be consumed straight after mealtimes. Naturally compliance to the correct oral health advice was low, when knowledge of that topic was poor. However, the general trend was that patient compliance, tended to be lower than patient knowledge, even in topics where there was good knowledge. For example, 60% were aware that quarterly visits with the GDP were recommended, however just over half of these patients actually visited their GDP as frequently.

Conclusion: This study has highlighted areas of poor patient knowledge. It has also demonstrated that, not all patients who are aware of the correct advice, necessarily follow it. To target areas poor knowledge, written information is now being provided alongside the verbal advice, which patients can refer to after the appointment. Furthermore, we have liaised with the Head and Neck dietician to ensure our advice is harmonious.

Surgical complications during dental implant placement in Head & Neck Cancer patients: a retrospective analysis

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Background: This poster reports on the complications that occurred during surgical dental implant placement and the outcomes of such complications on patients undergoing implant based oral-rehabilitation.

Methods: A retrospective analysis of 167 patients, who completed implant based prosthodontics oral rehabilitation at Birmingham Dental Hospital, Birmingham between 2012 and 2017, was performed.

Results: 779 dental implants were placed in 167 patients. Implant survival was 95.6% with a mean follow-up of 42 months. A variety of documented surgical complications occurred at the time of surgery. In total 25 patients experienced surgical complications during implant placement (15.0% of patients) who had 100 implants placed in total. 9 of these patients (36% of patients with surgical complications) experienced 12 implant failures (12% implant failure rate in patients with surgical complications).

142 patients had no documented surgical complications during implant placement (85% of patients) and had 679 implant placed in total. 15 of these patients (10.6% of patients with no documented surgical complications) experienced 23 implant failures (3.4% implant failure rate in patients that did not experience surgical complications).

Conclusion: A number of surgical complications can occur during the surgical placement of dental implants in this patient cohort. Within the limits of this study there appears to be an association between surgical complications during implant placement and implant failure.

Restorative Management of an Adult Cleidocranial-Dysplasia Patient

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Introduction: Cleidocranial dysplasia (CCD) is autosomal dominant condition caused by a mutation in the runt-related transcription factor (RunX2) gene on chromosome 6p21 1. It is a rare condition with prevalence reported as 1 in 1 million births. It is characterised by a spectrum of features; aplastic or hypoplastic clavicles, delayed closure of fontanels, frontal bossing of the skull, short stature, maxillary hypoplasia, hand and pelvic abnormalities 2. Dental features include in failure or delay in the eruption of the permanent dentition, retention of the primary dentition and presence of supernumery teeth 2. Dental anomalies can appear in isolation without any of the skeletal features of CCD 2.

Case report: A 38 year old female patient presented to the dental hospital with a retained deciduous dentition and with the exception of the mandibular first molars a fully unerupted permanent dentition. A diagnosis of CCD was made. The patient was managed with a combination of fixed and removable prosthodontics. Initial treatment included composite restoration to improve the appearance of the retained maxillary deciduous teeth and provision of a removable partial cobalt chrome prosthesis. The retained mandibular deciduous teeth however became progressively mobile. Cone beam computerized tomography (CBCT) was utilised which showed many of the unerupted mandibular teeth to be fused and ankylosed. The impacted anterior mandibular teeth were surgically removed under general anaesthesia and an iliac bone graft placed concurrently. 4 months later dental implants were placed in the mandible and the patient subsequently restored with a fixed metal ceramic implant retained bridge.

Discussion: CCD is a challenging condition to manage. Patients are generally managed by a multidisciplinary team often involving orthodontics, oral surgery and restorative dentistry. The use of CBCT to assess the unerupted dentition is invaluable when surgical removal of teeth or orthodontic alignment planned. Patients with CCD should ideally be diagnosed early to facilitate appropriate treatment at an early age in order to maximise quality of life for these patients.

Conclusion: CCD is a rare condition, patients would typically be diagnosed and treatment planned at a young age. In this case fixed and removable prosthodontics have been utilised to facilitate a good clinical outcome in an adult patient with late presentation.

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A Service Evaluation of Implant-based Prescriptions between the Restorative Department and the Prosthetic Laboratories at Birmingham Dental Hospital

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Introduction: The General Dental Council states that dentists should work effectively with their colleagues and contribute to good teamwork. If the clinician asks a colleague to provide treatment, a dental appliance, or clinical advice for a patient, they should make their request clear and give their colleague all the information they would need. However, is this the reality in practice? This service evaluation investigated implant-based prescriptions between clinics and the prosthetic laboratories at Birmingham Dental Hospital. It assessed the quality of prescriptions given to the lab for implant-based prosthesis and the implications of any missing information, with an aim to improve the quality of the information being communicated from the clinic to the lab and minimise adverse outcomes associated with poor communication.

Method: This was a prospective service evaluation carried out over a 7-month period. Implant-based laboratory prescriptions sent from the restorative department to the prosthetic laboratories at Birmingham Dental Hospital were evaluated.

Technicians from the on-site lab were asked to complete specific data collection forms for every implant-based prescription they received. Information being assessed included patient name/identification number, confirmation of cross infection, the date the clinical work was carried out, clinician's name, the date for when the work was due, documentation of the proposed treatment plan and information regarding the implant system and type/platform level used.

It was also reviewed whether the implant components (implant analogues and prosthetic component) for that specific clinical case were ordered and provided by the clinician or ordered by the laboratory and what effect this had on the time taken for the laboratory to produce the laboratory work.

Results: In total 51 cases were included. Key findings were that only the patient details were recorded in 100% of laboratory prescriptions. All other details were below 100%.

10 of the 51 cases received by the lab had implant components with them, which had been ordered by the treating clinician. Of the 41 remaining cases, 36 cases required

the lab to order the implant components for the laboratory work to be completed. However, in 25 of these cases the laboratory thought that it would have been more appropriate for the clinician to order the implant components. In total 7 cases were delayed.

Conclusion: This service evaluation provided an insight into the quality of the prescriptions for implant-based prostheses. Importantly, not all sections of the required information on the laboratory cards were filled out, which was expected to be 100% in all cases.

A number of cases received by the lab did not have implant components provided by the clinician and were subsequently ordered by the lab. It was deemed by the lab that the clinician should have ordered and provided the implant components, mainly implant analogues, in the majority of cases.

This service evaluation has highlighted the need for improved communication and agreement on how and by who implant components should be ordered, with the aim to provide an efficient and consistent service that minimises delays and ensures correct work is fabricated by the laboratory.

Health Education: The Impact of the Dental Team

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Introduction: Health improvement initiatives have had significant political and media attention recently with the introduction of the UK Chief Medical Officers' Alcohol Guidelines Review in January 2016 and the introduction in Scotland in May 2018 of alcohol minimum unit pricing. Smoking has long been targeted by the UK Government. Alcohol intake and tobacco use are linked to many oral health problems as well as systemic diseases. Evidence suggests that health education messages tailored to an individual patient's needs and given in the correct environment, by appropriately trained staff, can lead to lifestyle changes which can have a positive effect on a patient's general and oral health. In the longer term, the resulting healthier lifestyle which may be adopted has the potential to reduce cost to the health service. Dentists working in primary or secondary care seem ideally placed to identify patients with at-risk health behaviours; deliver a tailored health intervention to help people stop smoking and reduce alcohol intake.

Aim: The aim of this project was to determine the effectiveness of dentists' and dental students' delivery of tailored health education for smoking cessation and alcohol reduction to outpatients attending Glasgow Dental Hospital and School. To assess the impact of the interventions, patients who agreed, were followed up 3 months later to determine if behavioural change had taken place. An auxiliary aim of this project was to improve the link with specialised referral services including NHS Smoking Services and Glasgow Council for Alcohol.

Methodology: Staff received training in Smoking Cessation Advice and Alcohol Brief Interventions delivery. Data was collected via a questionnaire which outpatients attending the fixed and removable prosthodontic unit were asked to complete at their initial appointment. Patients were asked to answer honestly in response to questions about their smoking and alcohol habits. "Rethink your Drink" scratchcards

were utilised to quantify alcohol consumption in terms of associated health risk. The appropriate health intervention was delivered on the clinic and patients who agreed to follow-up were contacted three months later. There were no patient exclusion criteria to minimise bias when collecting data.

Results and Conclusion: Data for 55 patients was collected and analysed. 29% (n = 16/55) of patients received an Alcohol Brief Intervention. 24% (n = 13/55) of patients were tobacco smokers with 7% using an E-Cigarette (n = 4/55). 55% (n = 30/55) agreed to follow up however, not all these patients had at risk health behaviours and therefore, only those who received behaviour health education were followed-up to assess the impact of the health intervention given. 51% (n = 28/55) received some form of health education with only 54% (n = 15/28) of those agreeing to follow up. This highlights the difficulty in reaching those who require the greatest intervention. The results of this pilot study will be used to develop this study design further. Wider staff training and participation is necessary to effectively deliver health interventions to all outpatients; developing a skill which is likely to become more and more pertinent to the dental professional's role.

The pre-prosthetic planning of an edentate patient using a radio-opaque stent during Cone Beam Computed Tomography scanning: A Case report, 2018

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Background: Mandibular implant-supported overdentures are a suitable treatment option for the rehabilitation of an edentate patient, where conventional techniques enlisting reproducible prosthetic principles have failed in achieving adequate function. This case aims to discuss the use of Cone Beam Computed Tomography in assisting dental implant placement for a medically compromised patient with an atrophic mandible. This presentation illustrates the advantage of using a bespoke radio-opaque stent to guide desired implant positioning.

Case Report: A 70-year-old female patient presented to the prosthodontic new patient assessment clinic with a primary complaint of difficulty masticating causing persistent ileostomy blockages and preventing normal stoma function, resulting in hospital admissions. The patient has a history of bowel cancer in 2006, for which she underwent an ileostomy procedure. The patient contributed her reduced masticatory function to an ill-fitting 'loose' denture. Following an initial assessment of the patient a joint decision was made to attempt fabrication of a mandibular implant-supported overdenture to facilitate improvement in function, as efforts to improve upon the existing conventional denture would not produce significant change.

The patient was referred to Oral Surgery for the provision of two intra-foraminal mandibular dental implants. The panoramic radiograph revealed adequate alveolar bone height, but due to atrophy the position of the mental foramen appeared crestal and superficial. A Cone Beam Computed Tomography scan was indicated for the planning of implant placement. A radio-opaque stent was created using a copy denture technique to enable visualistion of the prosthetic teeth and baseplate. Prior to scanning, the stent was introduced by a clinician to avoid discrepancy in positioning. The CBCT report showed the superficial position of the bilateral mental foramens

and a knife-edge anterior mandibular ridge. A review of the CBCT with the intra-oral stent, by Oral Surgery and Restorative Consultants, allowed pre-prosthetic planning of desired implant placement in a buccal-lingual and mesial-distal plane. A decision has been made for two mandibular intra-foraminal implants to be placed utilising a flapless surgical approach.

Discussion: Implant-supported overdentures offer positive patient outcomes in comparison to conventional mandibular complete dentures when restoring the edentate patient. Pre-prosthetic planning enables accuracy of implant placement to facilitate a desirable prosthetic result. The intra-oral radio-opaque stent in this patient case allowed for the treating clinicians to carefully select placement to enable best treatment outcomes. In the absence of the stent, the restoring clinician will be required to work around the predetermined implant positions, potentially compromising strength in areas of the prosthesis and reducing aesthetic outcomes.

Case report on camouflaging congenitally missing laterals digitally

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Introduction: Missing lateral incisors are the most common congenitally missing teeth in the anterior maxilla 1. It is more common in Females and bilaterally 2. The patient in this case was a female in her forty's who attended seeking to improve the appearance of her upper anterior teeth.

Clinical case: The aims were to examine the level of current aesthetic issue and to establish improved aesthetics and maintain function. The patient on presentation has missing maxillary laterals. On exam we noted previous reshaping of the teeth had been done with composite. The patient had a high lip line with uneven gingival architecture. An increased overbite was also observed with group function bilaterally. Treatment options were discussed in detail with the patient. The first option discussed was orthodontic treatment followed by prosthodontic work via placing implants or to bridge in missing lateral spaces. The patient, mainly due to length of treatment, declined this interdisciplinary approach. Another was to use composite to reshape, the patient was not interested in this given she had this done in the past. Using porcelain to reshape the teeth was discussed and lastly there was the option to do nothing.

The patient chose porcelain veneers on the centrals and canines with ¾ crowns on the 1st pre-molars. To explore this further a scan of her existing teeth were taken with a Dentsply Sirona Cerec scanner and sent to Southern Cross lab for digital wax up. Scanning was ideal in this case due to the patients sensitive gag reflex. This mock-up was tried in the mouth, which the patient was happy with. It was agreed to veneer the centrals and canines. Regarding the canines ¾ crowns were chosen to maximise the enamel bonding to provide greater retention in lateral movements. Following cementation, the patient was fitted with a splint for night usage to avoid any wear from parafunction.

Conclusion: Patients with missing laterals are confronted with aesthetic and functional problems from the young age1. Planning is imperative to define the treatment option that will provide the best individual results for patients. Digital

scanning meant no PVS impressions as the patient had a sensitive gag reflex and also allowed for a quicker return time from the lab.

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Screening, Diagnosis and Management of Tooth wear in General Practice using a Modified Tooth Wear Index: A Clinical Audit

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Introduction: There is an increasing pressure on dental practitioners to examine and record more and more clinical information. This is especially true in NHS general practice where and practitioners are expected screen, diagnose, treatment plan, consent, provide brief interventions, discuss oral cancer and discuss costs in limited appointment time. The Scottish Clinical Effectiveness Programme (SDCEP) guidelines 'Oral Health Assessment and Review', published in 2011, recommends that tooth wear is recorded as part of a patient's baseline examination. It states that the type of tooth wear should be recorded as well as the aetiology. In addition, preventive treatment, if necessary, should be discussed with the patient and the tooth wear monitored. Studies have projected that edentulism will decline by 50% from 1990 to 2025 and the most recent 'Adult Dental Health Survey 2009' shows that the prevalence of anterior tooth wear is increasing (66% in 1998 to 77% in 2009). Tooth wear is therefore becoming a more prominent dental health issue that clinicians must screen, diagnose and manage appropriately. There is not currently a universally adopted method or standard for screening or recording tooth wear in primary or secondary care.

Method: This audit, conducted in general dental practice, looked at patients who had evidence of tooth wear recorded at their baseline examination and routine examinations. It looked to see if the type of tooth wear (attrition, erosion, abrasion or a combination of these) were recorded and if the possible aetiology was recorded. It then looked to see if the wear was being managed (preventive +/-restorative) and if the progression of tooth wear was monitored in any way. The audit involved a two stage retrospective analysis of new patient and routine examination records. It was completed by three dentists looking at a total of 150 adult patients (50 patients per dentist).

Results: In the first round: type of wear, aetiology, management and progression were measured 28%, 46.7%, 58% and 52% respectivly. Data from round two exhibited a marked improvement in all domains measured in the range of 96%-100%. One of the main outcomes and mode of improvement was the implementation of a modified tooth wear score tool based on the Smith and Knight Tooth Wear Index which prompted information on the above domains to be recorded.

Conclusion: With increasing demands on information gathered in dental examinations the use of screening tools such as the modified Smith and Knight Index used in this project or the BEWE are effective and efficient methods for prompting tooth wear investigations and management. Monitoring in the traditional form of study models can be costly and have storage implications and the use of silicone putty indexes are a good alternative. Recording a tooth wear score initiates discussion with patients about tooth wear. The literature suggests that once wear has been diagnosed and the patient made aware of this then progression appears to be very slow.

Coltene award

The diagnosis and management of generalised tooth surface loss in a partially dentate 79 year old male.

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As our ageing population are retaining teeth for longer, tooth surface loss is becoming an increasingly significant problem. It is essential to diagnose the cause of tooth surface loss. Occlusal rehabilitation is challenging in patients with extensive tooth surface loss due to issues with tooth position and possible loss of restorative space. A comprehensive treatment plan must be made to address these issues.

This 79 year old retired male patient presented to me in the dental hospital and his main concerns were; pain from a lower anterior tooth and the appearance of his worn teeth. The pain was localised to a lower central incisor and he had suffered with wear from his teeth over a number of years. There was severe generalised wear on his whole dentition with multiple failing restorations. His last visit to a dentist was 8 years ago where he had a poor experience.

A multidisciplinary approach to care was implemented with careful pre-treatment planning using articulated study casts and diagnostic wax-ups on a semi-adjustable articulator. This allowed for assessment of the existing occlusion and plan definitive treatment. Several factors were taken into consideration, for example, the existing occlusion, restoration design, functional concerns, and aesthetics along with choices of the appropriate restorative material to manage the patient's concerns.

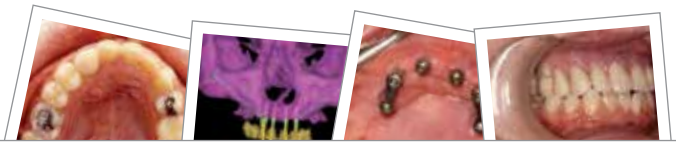
The initial management involved stabilising active disease; periodontal and caries with direct restorations and endodontic treatment of the lower left central incisor.

Following this successful phase, a diagnostic wax up was carried out on articulated casts (in retruded contact position) to raise the vertical dimension by 5mm. Due to the generalised tooth surface loss, there had been dento-alveolar compensation leading to insufficient interocclusal space to place any restorations without raising the occlusal-vertical dimension. Informed verbal consent was obtained at every appointment, especially prior to increasing the occlusal vertical dimension with direct composite resin from the LR4 to the LL3.

Direct zinc-reinforced GIC cores were placed on the posterior molars and minimal preparation cast metal onlays were placed to provide cuspal coverage.

The upper right central incisor and canine roots were retained for overdenture abutments. There were no symptoms/pathology associated with these teeth and therefore were retained to reduce the progression of bone loss in comparison to extraction of these teeth.

Following the definitive phase of treatment, the patient was given a post-operative maxillary splint to protect the restorations and his remaining dentition.



The overall management involved the stabilisation of periodontal disease, caries, and apical pathology (endodontic treatment of the LL1) with the provision of the following; composite build ups, upper partial acrylic overdenture, porcelain fused to non-precious metal crown (UL1), direct core restorations with overlying non-precious cast metal onlays and a michigan splint.

The outcome of this treatment met all of the objectives from the beginning and the patient had no pain or other concerns. As a clinician, this was a challenging yet thoroughly enjoyable case and a fantastic learning opportunity.

Managing the heavily restored dentition

The British Society of Prosthodontics 2019 Annual Conference

Friday 15th & Saturday 16th March 2019, London

Although it seems a long way off, the work for the 2019 BSSPD conference is already very advanced and the President Elect Professor Phil Taylor invites you to the Royal College of Physicians in the beautiful surroundings of Regents Park, London.

The conference will be held on Friday 15th – Saturday 16th March 2019 and will be considering the particular problems of 'managing the heavily restored dentition'. We have already confirmed that Professor Terry Donovan from Chapel Hill, South Carolina will be the keynote speaker. Home speakers already booked include Shakeel Shahdad, Peter Briggs, Finlay Sutton, Simon Stone and Amitha Renauta. We intend to have a panel of experts to discuss cases as part of the conference which will continue our inclusive and interactive promotion of prosthodontics to all levels of practitioners.

Peter Briggs and Phil Taylor are for the third year presenting Masterclass presentations for the BDA on behalf of the society which this year links with the topic for the 2019 conference. We hope to integrate that venture with a hands on session for delegates as an additional attraction to the main conference.

We look forward to seeing you in 2019.

CPD certificates

This meeting will provide 12 hours of verifiable CPD in total (6 hours Thursday and 6 hours Friday). Delegates wishing to obtain CPD MUST sign in on both days to be awarded the hours allocated for that day.

Following the conference, delegates will receive an email containing a link to the conference on-line feedback form. Once this form has been completed, the CPD certificate can be downloaded.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Certificate of Verifiable CPD
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