Special Care Dentistry Trainee Category

1. Hana Cho

Title: Management of patients with advanced dementia: to treat or not to treat

Authors: Cho, H. ¹ and Kumar, N. ²

¹ Academic Clinical Fellow in Special Care Dentistry ² Consultant in Special Care Dentistry

Special Care Dentistry Department, Eastman Dental Hospital, University College London Hospitals NHS Foundation Trust

Abstract:

Background: Patients with advanced dementia can present with challenging behaviour and reduced cooperation. Dental intervention requires careful assessment of risks and benefits.

Methods: All patients with advanced dementia/challenging behaviour attending a London-based teaching hospital between November 2016 – October 2019, were identified. Data on demographics, dental disease and management were collected.

Results: Ten patients (4 males, 6 females) with advanced dementia/challenging behaviour were identified. Their mean age was 79 years old (range 60-92). All patients were dependent with regards to daily living. Referral was for dental management with pharmacological adjuncts, predominantly general anaesthesia (GA). All presented with high levels of dental disease (gross caries/retained roots).

Patients underwent anaesthetic assessment where it was determined that the risks of post-operative complications in relation to dementia progression after GA outweighed the benefits. One patient had dental treatment under anaesthetist-led intravenous sedation, while 7 patients received non-pharmacological behavioural management for teeth that were accessible, and 2 monitored. The focus was on preventative advice and pain/infection control.

Conclusion: This case series highlights the need to balance the high levels of dental disease with the risk assessment for dental intervention in patients with advanced dementia/challenging behaviour. An early focus on prevention is key in managing this cohort.

2. Zoe Greenwood

Title: Exploring the dental issues around biologic therapies: a clinical case demonstrating the dental considerations.

Authors: 1. Zoe Greenwood, Specialist Trainee in special care dentistry 2. Dr. Sian Wilson, Specialist in special care dentistry, North Wales Community Dental Service (NWCDS).

Abstract:

Background: A 57 year old man referred to CDS with a complex medical and drug history including traumatic brain injury, osteoporosis, poorly controlled insulin dependent diabetes and infliximab infusions for ulcerative colitis.

Biologic therapies are continuing to emerge and be prescribed for a range of autoimmune and cancer conditions. An overview of this group of drugs and a summary of the dental recommendations is presented here.

Clinical management: After the initial dental assessment, a literature search was conducted for publications and guidelines of relevance to dentistry and biologic therapies. Liaison with medicines information and patients' gastroenterology team was necessary for information specific to infliximab and timing of invasive dental treatment. A time specific treatment plan was formulated and carried out.

Discussion: Since starting infliximab, the patient experienced a severe dental abscess which led to hospital admission and treatment under maxillofacial surgery. He has a number of medical and dental risk factors which predispose him to the risk of significant dental or orofacial infection and as such it was essential to address these and prevent further acute problems.

There are very few published papers so far with respect to dentistry and biologic therapies and evidence base is limited. Guidelines from Gastroenterology, Dermatology and Rheumatology are in agreement regarding the increased risk of infection and delayed or poor healing after surgery. However, variation exists around the interruption of biologic drugs and optimal timing of dental treatment.

3. Rebecca lles

Title: The challenges of fluctuating capacity; a case study

Author: Rebecca Iles (StR Solent NHS Trust)

Abstract:

This case is regarding a frail 69 year old female, who was diagnosed with schizophrenia and anorexia. The patient was referred to the special care department at Guys Hospital, London, by her general dental practitioner (GDP) for an implant assessment. The patient was partially dentate and presented with an asymptomatic, but heavily restored dentition which was failing. Radiographic examination revealed multiple pathologies. There were concerns about the patients eating due to her dental/oral health.

This was a challenging case as the patient had fluctuating capacity, variable cooperation and there were social circumstances which further complicated the dental management of this patient.

This case involved a multidisciplinary approach, liaising with the patient's psychiatric consultant, members of the Special Care department at Guys and family members.

The poster will describe the challenges this case presented and how these were overcome in order to provide appropriate treatment for this frail patient with mental health problems and fluctuating capacity.

4. Meave Mclernon

Title: Linking Care Homes with Local Dental Practices; A Pilot.

Authors: Hughes, A., Mclernon, M., Utting, C.

Aim: To evaluate the success of the oral care pilot linking care homes with local dental practices, through a qualitative interview.

Background: Public Health England reported that older adults in nursing or residential homes are more likely to have decayed or missing teeth, compared to the general population. They may experience challenges in accessing services and may receive inadequate care when they do (PHE, 2018).

NICE guidelines highlight the need to improve education of care staff in providing quality oral care and assessing resident's oral health. (NICE, 2016)

Methodology: The pilot involved twenty care homes and four general dental practices within Derbyshire and Nottinghamshire. Qualitative interviews were conducted with

Care home staff and General dental practitioners who implemented the scheme and the results analysed.

Discussion: There were numerous strengths and barriers identified. The pilot was recognised as building vital links within the community and providing excellent training for Care home staff. However, there were significant issues with determining exemption status of residents and with the financial model. Ultimately, it was felt the pilot was not feasible in its current form.

Key words: 'Oral Care Pilot' 'Care homes' 'General dental practice'

5. Esther Stephenson

Title: Case Study: Care when prescribing azole antifungals in patients taking statins

Author: E. Stephenson StR – Special Care Dentistry (ST1) Birmingham

Abstract:

Statins are also known as HMG-CoA reductase inhibitors and are a class of lipid-lowering medications that reduce the risk of cardiovascular disease. It is common knowledge that within our aging population we are at an increasingly higher risk of cardiovascular disease.

In 2018 Atorvastatin, one of the more common statins seen within dentistry was recorded as the leading chemical drug dispensed in England which has increased by 234.4% since 2007. Simvastatin was the seventh most commonly dispensed drug in 2018 and fourth in 2017.

Case: 83 year old female.

Referred by for surgical extraction UL4 retained root (RR), prior to making a new denture.

Her medical history includes previous stroke in 2006, hypertension, hypercholesterolemia, arthritis, wheelchair user and extreme dental anxiety. Medication included Clopidogrel. Bisoprolol, Dihydrocodeine, Simvastatin. Diagnosis was UL4 RR and denture stomatitis

Following the initial assessment, a letter to the referring GDP highlighted the diagnosis of denture stomatitis. The patient re-presented for her treatment having been prescribed Miconozole gel which is contraindicated as the patient is taking a statin.

The concomitant use miconazole with most statins including simvastatin and atorvastatin should be avoided if possible.

6. Brooke Zaidman

Title: Developing a Risk Assessment form for Domiciliary Dentistry. A modified e-Delphi study.

Authors: Brooke J Zaidman BDS MFDS RCPS(Glas), Professor Jenny Gallagher, Dr Tunmise Awojobi, Dr Debbie Lewis, Mr Chris Dickinson, Dr Norma Smart.

Abstract:

Aim: Develop a standardised domiciliary dentistry risk assessment (RA) form based on expert consensus which will act as a safety tool for dentists providing domiciliary dentistry.

Method: A master domiciliary dentistry RA form was developed using a modified e-Delphi method. A draft RA form based on existing local and national guidance forms was refined over three questionnaire rounds by gaining the consensus of an expert panel. This panel consisted of dentists with experience in domiciliary dentistry from England and Wales. Content validity (I-CVI) using a predefined level of consensus (0.78) was used alongside content analysis of comments.

Results: Twenty-four of the original 29 participants completed three questionnaire rounds. Of 11 items with consensus, 9 were hazard categories: 'external parking and access', 'access inside the building', 'dental team safety', 'fire and electrical', 'cross infection', 'manual handling of patient', 'environmental conditions inside the premises', 'patient' and 'other'. Two items were: a 'Red-Amber-Green risk rating' and a 'recommend action' table. This study highlights the importance of a comprehensive domiciliary policy.

Conclusion: This study produced expert panel consensus on a standardised four-page domiciliary dentistry RA form. This will be piloted prior to national introduction. Consideration must be given to occupational focus for other dental professionals. Further research on domiciliary dentistry policy is required.

Dentist Category

1. Hassan Abed

Title: The association between denture use and occurrence of osteoradionecrosis following radiotherapy for Head and Neck Cancer: A retrospective case-control study.

Authors:

Hassan Abed ^{1,2}, Mary Burke ², Sasha Scambler ³, Suzanne E Scott ¹

Affiliations:

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Acknowledgment: This study was funded by the University of Umm Alqura (number: 4360121455), Saudi Arabia as a part of the first author's PhD Studies at King's College London, Faculty of Dentistry, Oral and Craniofacial Science, London, United Kingdom.

Abstract:

Aims: This study aimed to assess the association between denture use and occurrence of osteoradionecrosis (ORN) following radiotherapy for head and neck cancer (HaNC).

Methods: Medical records of 439 HaNC patients treated with radiotherapy at Guy's Hospital (London) (2014-2019) who had missing teeth at the time of discharge were reviewed.

Results: Patients had an average of 14 missing teeth and 39% wore dentures. Twenty-two (5%) developed ORN. Univariate logistic regression indicated that longer duration of radiotherapy (OR=1.03; 95% Cl=1.00 - 1.06; p-value = 0.048) and more missing teeth in the lower anterior area (OR=1.11; 95% Cl= 1.01 - 1.22; p-value = 0.024) were significantly associated with the development of ORN. Denture use was not significantly associated with the occurrence of ORN (OR=1.94; 95% Cl=0.79 - 4.81; p-value = 0.150). Out of 22 who developed ORN, 11 (50%) wore dentures. Of these, 5 patients developed ORN at the same location of dentures.

Conclusions: Within the limitations of this single-centre study in which few patients developed ORN, denture use does not appear to be a risk factor for ORN following radiotherapy for HaNC.

2. Daniel Gillway

Title: Quality Improvement in Surrey and Sussex Domiciliary Dental Care

Authors: Daniel Gillway - Dental Officer, Meg Keddie - Senior Dental Officer, East Surrey Dental Hospital

Abstract:

Background: Domiciliary dental care may be required when significant barriers exist for patients to attend a traditional oral healthcare setting. Following an initial audit between January 2018 - July 2018 of domiciliary referrals there was implementation of triaging guidance and criteria for domiciliary treatment.

Aims: This project aims to improve access to dental services and treatment for housebound patients

Method:

- Database: Criteria for domiciliary treatment, Patient age, Referral, Urgent/Routine, ASA status, Outcome and treatment
- Departmental funding for new equipment, Implementation of new policies and documentation
- Prospective data collection October 2018 October 2019 using database

Standards:

- All domiciliary dental patients are triaged prior to visit and suitable for domiciliary care
- Domiciliary equipment, policies and documentation is current and up to date

Results:

- 77 domiciliary visits recorded in database
 - 100% patients triaged prior to visit
 - Referrals included GP (20%), GDP (5%), Care home staff (13%), Consultant paediatric and special care dental services (20%), Patient's relatives and carers (20%) and other sources (22%)

- Treatment provided included extractions, restorations/fillings, perio treatment
- 10% of visits triaged urgently
- Zero patient safety or cross infection incidents recorded

Effects of change: The changes implemented have improved the treatments offered to our patients, staff satisfaction carrying out doms and freed up highly in-demand clinic appointments.

3. Máiréad Hennigan

Title: Demographics and trends in patients over 65 years old presenting to a trauma clinic in an oral and maxillofacial surgery department.

Author: Máiréad Hennigan, Dental Core Trainee, NHS Lothian

Abstract:

This study was carried out to identify the demographics and trends in the presentation and the subsequent management of patients over 65 years old attending the trauma clinic in St. John's Oral and Maxillofacial (OMFS) Department, Edinburgh, over a sixmonth period.

The patients were classified according to the following parameters: gender, age, cause of injury, injury sustained, location injury was sustained, other injuries sustained, whether conservative or surgical treatment was carried out, follow up, and complications. The patient ages ranged from 65 to 93.

A wide range of injuries presented, with fractured zygoma and fractured orbital floor being the most common injury. The mechanism of injury in the majority of cases was a fall, most of which occurred when outside in the street or walking. The injuries tended to be isolated, but any additional injuries that were sustained tended to be fractured elbows, fractured wrists and facial lacerations. Most of the injuries that presented to the OMFS department were treated conservatively, with soft diet, and with or without a review. The most common complications at review appointments when treated conservatively were paraesthesia and haematoma formation.

4. Don Jayawardena

Title: Prosthetic rehabilitation of older patients post radiotherapy treatment - a case series.

Authors: D.S. Jayawardena – DCT2 in Restorative & Special Care Dentistry, J. Mann – Speciality Registrar in Special Care Dentistry, L.D. Addy – Consultant in Restorative Dentistry

Abstract:

Following head and neck cancer, side effects of radiotherapy such as fibrosis of circum-oral and masticatory muscles, xerostomia, and atrophy of the mucosa can pose a challenge when attempting prosthetic rehabilitation. An increased risk of oral candida, dental caries and osteoradionecrosis (ORN) can also complicate denture construction and long-term care. Prosthetic rehab in older patients post radiotherapy requires modification as discussed in these case studies.

Case 1: A 79-year-old gentleman who was diagnosed with an intra-osseous squamous cell carcinoma (SCC) within the right mandible. He underwent surgery for a fibular free flap reconstruction, then had post-surgery radiotherapy. The patient was keen to save his remaining dentition and had upper and lower acrylic partial dentures constructed.

Case 2: A 68-year-old lady was diagnosed with a SCC of the soft palate; she underwent treatment with chemo-radiotherapy. The patient presented for prosthetic replacement of her dentition, with a large defect within her palate. The patient was managed with an upper acrylic partial denture, designed to conform to her protruding and mobile lower anterior teeth.

5. Meg Keddie

Title: Case Report - Explantation and dental clearance of a domiciliary patient with advanced dementia – The challenges and barriers in the age of implant dentistry.

Authors: Meg Keddie; Senior Dental Officer, East Surrey Hospital , George Cove; OMFS SHO

Abstract:

Background: Implant retained protheses are becoming more available even to those in advancing age which will give rise to new management challenges especially when urgent treatment is necessary. With an ageing population and reliance upon care givers to deliver oral care, the dental team and wider social care colleagues should anticipate greater dependence on multidisciplinary management of such cases when things go wrong.

Objective: To outline a domiciliary patient's journey from stability, to urgent OMFS referral and eventual explantation whilst highlighting the decline in overall general health status observed over the prolonged period.

Methods: Collation and presentation of documentation including medical notation, appointments, emailed and telephone correspondence over the course of 10 months preparing her surgery.

Discussion: This report demonstrates significant morbidity experienced while awaiting her explantation procedure. The impact of implant decline in advancing dementia cases should not be underestimated and where possible barriers to treatment should be resolved to avoid decline in nutrition, mobility and tissue viability.

Reflection: Utilisation of 'implant passports' should be encouraged to facilitate potential future surgical intervention in elderly patients. Rapid access virtual clinics may be of use in future when planning such cases.

6. Laura McKay

Title: You're Never Too Old To Smile

Author: Laura McKay Community Dental Officer BDS MFDS RCPS (Glasg) PGCert

Abstract:

Background: 93 year old female attended due to discomfort with her teeth. Her main complaint was discomfort from a mobile upper left canine tooth. She was aware of other cavities and wanted dentures to aid function and aesthetics.

Her medical history included diabetes, arthritis, high cholesterol, hypothyroidism, diverticulitis and a hearing impairment. She was under the care of speech and language team for dysphagia and eats a modified textured diet. She has capacity to make decisions and can accept treatment under local anaesthetic.

Management: We discussed options, considering she had never worn dentures, wasn't experiencing toothache and had a pureed diet;

- Removing the mobile tooth, monitoring the others
- Removing teeth of hopeless prognosis, restorations and dentures
- Remove all teeth of poor prognosis and construct dentures

The patient was keen to wear dentures and her main concern was improved aesthetics and having a nice smile over function. She wanted to maintain what teeth she could and a decision was made to transition with partial dentures with the option for additions later. This case highlights the importance of respecting patient wishes and priorities.

7. Tulsi Patel

Title: Multi-disciplinary Management of a Patient with Acromegaly Diagnosed with Head and Neck cancer: A Case Study

Authors: Tulsi Patel¹, Joanna Dick², Stacey Clough³

- 1 Dental Core Trainee in Restorative Dentistry, Royal London Dental Hospital, Bart's Health
- 2 Registrar in Special Care dentistry, Royal London Dental Hospital, Bart's Health
- 3 Consultant in Special Care Dentistry, Royal London Dental Hospital, Bart's Health

Abstract:

Background: A 66-year-old male patient attended for urgent dental assessment before starting radiotherapy. He had multiple morbidities including, acromegaly, hypopituitarism, primary hypoparathyroidism, cavernous aneurysm, osteopenia, osteoarthritis, right-sided abducens nerve palsy and visual impairment. He had tonsillectomy and left neck dissection and was due to start radiotherapy.

Presenting problem: Clinical and radiographic assessment demonstrated a prognathic mandible with a severe class 3 malocclusion and several carious retained roots. He had a partial denture which offered poor retention and stability, with compromised aesthetics.

Clinical management: It was vital the patient was made dentally fit in a short time-frame. Six retained roots were extracted in one visit under local anaesthesia and healing reviewed. Post-radiotherapy oral rehabilitation was challenging in view of the edentulous foundation, tongue thrusting habit and side-effects of radiotherapy. This required careful prosthodontic planning and involved provision of resin-bonded bridges to replace UR2 UL2.

Discussion: This case required an MDT approach to care. Although dentistry was a small element of his overall care, tooth replacement had a very positive impact on the patient's quality of life, allowing him to regain confidence having undergone significant changes in facial appearance due to head and neck oncology treatment and acromegaly.

8. Sarah Pick

Title: The Development of an Oral Health Care Referral Pathway for People affected by Stroke in Swansea Bay University Health Board (SBUHB).

Author: Sarah Pick, Senior Dental Officer, SBUHB

Abstract:

Stroke is one of the biggest killers in Wales and a leading cause of disability. There are nearly 67,000 stroke survivors living in Wales. Barriers gaining access and accepting dental care are well recognised in stroke patients leading to compromised oral health and dental disease, impacting on oral function, self-esteem and quality of life.

SBUHB have developed a care pathway aimed to link existing stroke and dental services, establishing a network of care within the CDS and primary care. This is to support patients adapt to life after a stroke and to maintain oral health, which is often neglected at these difficult times. The referral pathway is based on the Modified Rankin Scale (MRS) and ensures stroke users have access to specialist dental services, receiving input and being supported by consultants and specialist nursing staff in stroke medicine.

The poster summarises the development of the pathway thus far: aims, eligibility criteria, service user involvement and referral protocols. A case presentation highlights a stroke patient who would benefit from such a pathway being implemented. Early dental intervention and prevention is essential to promote a level of independence amongst stroke survivors leading to improved oral health and quality of life.

9. Jessie Tebutt

Title: The extreme of age: delivering dental treatment in the complex older person

Authors: Miss Jessie Tebbutt, Dental Core Trainee 3, Special Care Dentistry

Dr Charlotte Wilson-Dewhurst, Academic Clinical Fellow, Special Care Dentistry

Dr Andrew Kwasnicki, Consultant, Special Care Dentistry

Liverpool University Dental Hospital

Abstract:

With 2% of the UK population aged over 85 years significant medical and social factors increasingly affect dental care delivery. We demonstrate considered multidisciplinary team (MDT) approach to treatment delivery in an older frail patient.

A 91-year-old female was referred by her general dentist for management of a neglected dentition. Multiple co-morbidities included osteoporosis, recent history of stroke, heart failure, hypertension, osteoarthritis, mobility issues with inability to self-transfer to the dental chair. Complicating medications included previous intravenous bisphosphonates, Denosumab and anticoagulants. Initial minimally invasive management included monitoring, preventative measures and hygienist support. On

becoming symptomatic, staged clearance with provision of immediate complete dentures was completed.

In complex patients, benefits and risks of invasive treatment must be carefully weighed. Minimal invasion may initially be more appropriate in the absence of symptoms. An MDT approach utilising team skill mix with extended roles of the dental nursing team should be used. Due to associated risks, treatment should be conducted in close consultation with relevant medical specialities.

An MDT approach together with reasonable adjustments is essential to allow safe provision of care for elderly patients. Management of these patients is increasingly complex due to the presence of multiple co-morbidities, poly-pharmacy and physical frailty.

10. Jinesh Thakrar

Title: Quality Improvement Project to reduce risk of aspiration pneumonia in advanced dementia patients

Authors: Jinesh Thakrar, Senior Dental Officer, Una Monaghan, Theresa Spencer, Herefordshire Special Care Dental Service

Abstract:

Background: With an ever growing and ageing population, the number of patients diagnosed with dementia is on the incline. These patients have difficulty maintaining their oral health, consequently increasing their risk of aspiration pneumonia. Amongst the elderly population these hospital admissions remain a significant risk and can dramatically affect and alter a patient's life.

Aims: We look to assess and improve advanced dementia patients' oral health, subsequently reducing their risk of developing aspiration pneumonia.

Method: We approached multiple care and residential homes to provide routine dental examinations for patients with advanced dementia. We assessed their oral hygiene using a modified plaque score and implemented tailored oral hygiene training to staff. We then measured and reassessed their oral health.

Conclusions: There was a vast improvement in the plaque scores of the patients we examined. Patients oral hygiene improved and carers reported greater acceptance of oral care. Moving forward, we now look to assess the number of hospital admissions of dementia patients with aspiration pneumonia and aim to reduce this number across the Hertfordshire county.

11. Michelle Wooi

Title: Traumatic periodontal contacts and the older patient

Author: Michelle Wooi, Dental Core Trainee, Liverpool University Hospital

Abstract:

A deep overbite is where the vertical overlap of the upper and lower incisors exceeds half of the lower incisal tooth height. This can cause problems including soft tissue trauma leading to pain, tooth wear and lack of inter-occlusal space, all of which presents its own restorative challenge. Treatment options for patients suffering from pain due to traumatic overbite on soft tissue (Akerly I II and III) can range from a simple provision of removable appliance to multidisciplinary management including involving orthodontics and orthognathic surgery. Rehabilitation option of traumatic overbite in the older patient is further complicated by compounding factors such as history of tooth loss, lack of posterior occlusal support, migration of maxillary incisors and overeruption of the lower incisors causing a deranged occlusal plane.

This poster will highlight how patients with traumatic periodontal contacts and missing posterior teeth can benefit from a partial denture with an anterior bite platform. The denture will replace missing teeth and provide pain relief by allowing contacts on the platform and not periodontal tissue. This is particularly useful in the older patient who may be medically compromised, where rehabilitation with fixed prostheses or orthodontics or orthogonathic surgery may not be possible.

Dental Care Professional Category

1. Farheen Naqvi

Title: Duraphat Toothpaste 2800ppm and oral health related CQC standards - An evidence based intervention to improve the oral health in care homes

Authors: Naqvi F, Richemond J*, Masood A * Affiliations: Whittington Health NHS Community Dental Services WH CDS- Oral Health Promotion, London boroughs of Camden and Islington-Public HealthThe British Association for the Study of Community Dentistry BASCD*

Abstract:

Delivering Better Oral Health DBOH (2017) recommends the administration of high fluoride toothpaste Duraphat 2800/5000 for older adults with obvious coronal and root caries. The London borough of Islington commissioned an Oral Health Needs Assessment in 2009 for older people aged >65 years living in care homes. A key finding was that over 63% of the residents with natural teeth had caries.

The findings from the OHNA led to a number of oral health quality improvement recommendations that were implemented in line with the NICE guidelines setting ground for the development of oral health CQC outcomes:

- Oral health risk assessments
- Daily oral care logs
- Improved access to dental services
- Improved oral health knowledge and skills for care home staff

A follow up OHNA survey in 2013 showed a marked improvement in oral health as a result of the implementations.

In 2013 a Joint Strategic Needs Assessment for Camden and Islington showed similar demographics of this patient group in both boroughs, whereby Camden was added to the oral health improvement initiative In 2014 the regional consultant in Dental Public Health and the Clinical Director of WH CDS authorised a PGD for the administration of Duraphat 2800 toothpaste for dentate residents in Camden and Islington care homes.

The poster represents the evidence based, best practice approach to oral health related quality of life initiatives by the Oral Health Promotion Team in Camden and Islington care homes, compliant with the NICE guidelines. The exemplary standard is currently being rolled out by the service to boroughs in Northwest London following the CQC Smiling Matters report 2019.