





Information for Candidates

2016



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1. Preface

Where does the MJDF assessment fit into a modern dental career?

The FDS and FGDP(UK) at the Royal College of Surgeons of England provide a well-established, modern, educationally sound assessment in the Diploma of Membership of the Joint Dental Faculties (MJDF RCS Eng).

The aim of the MJDF examination is to assess knowledge, application of knowledge and graduates' understanding of the structures and processes required to provide quality-assured dental healthcare after completion of the Dental Foundation Training programme, whether they are pursuing a career in general or specialist practice, in either primary or secondary care.

The UK *Dental Foundation Training Curriculum* (published by COPDEND) defines the competences, curriculum, educational content, training requirements, and expected outcomes for all dental graduates who complete dental foundation training. Successful completion clearly demonstrates a level of achievement beyond undergraduate training and a commitment to professional development which may be useful to future employers.

Although not essential, it may be a desirable requirement for entry into specialist training. It is the starting point for general dental practitioners who wish to achieve the Fellowship of FGDP(UK) and become Fellows of the RCS Eng.

The two dental faculties believe that the MJDF provides a modern, fit-forpurpose, innovative assessment for today's young dentist. It also removes the reliance on traditional tests of knowledge and, together with the structured professional skills assessment, allows for triangulation of methods to assess the areas set out in the foundation training curriculum.



2. Introduction

This document contains background information and guidance for candidates preparing for the MJDF and highlights further sources of help. Annex A contains specimen Part 1 and Part 2 questions; Annex B contains a list of frequently asked questions, while the MJDF resource list can be found in Annex C.

3. How to use this document

This document should be read alongside the *MJDF Regulations*, available to view on the MJDF website (www.mjdf.org.uk).

This document contains important guidance which is supplementary to the *MJDF Regulations*. Any candidate preparing for the MJDF assessment should therefore read both the *MJDF Regulations* and this document in full.

4. A Curriculum for UK Dental Foundation Programme Training

The publication *Dental Foundation Training Curriculum* is the basis for the MJDF assessment. The curriculum can be downloaded from the <u>COPDEND</u> website.

5. The format of the MJDF summarised

Part 1 examination

The Part 1 examination will consist of one paper, based on the foundation training curriculum, assessing knowledge and applied knowledge. This includes 150 Single Best Answer (SBA) questions within a single three-hour paper. The questions carry equal marks. The examination is not negatively marked and there are no trick questions.

Part 2 examination

The Part 2 examination will consist of a structured professional skills assessment, compromising 14 stations within a single circuit.

The assessment will test candidates' communication skills, clinical competence and clinical reasoning.



Final award of the Diploma of MJDF

Candidates are reminded that once Part 1 examination has been completed Part 2 examination must be completed within a five-year time frame.

6. Training, education and preparation for MJDF

The *Dental Foundation Training Curriculum* sets out the competencies (that is, the knowledge, skills and attributes) that dentists should acquire following two years' postgraduate experience.

It should be stressed that the MJDF assessment is open to, and will have value for, all dentists wishing to obtain a first-level postgraduate diploma, and is not restricted to recent graduates.

Tutor networks

There is a network of tutors to assist those preparing for the MJDF assessment. Further details are available on the MJDF website (www.mjdf.org.uk).

Study days

Study days are organised at by the FGDP(UK) around the UK to assist candidates with preparation for the MJDF. Please visit the MJDF website for details of upcoming study groups and seminars.

Non UK-based candidates

MJDF Part 1 is offered in several overseas centres. For more information please visit the MJDF website www.mjdf.org.uk.

Candidates who wish to attend the MJDF examination should ensure that they can access sufficient study support to satisfy the requirements of the foundation training curriculum.

7. Membership of the dental faculties

Successful candidates will be eligible for joint membership of the two dental faculties at The Royal College of Surgeons of England for a period of six years following completion of the MJDF Diploma. At the end of this six-year period, holders of the MJDF may choose to join either faculty or continue with membership of both, in accordance with such membership categories and fees that may be prescribed at that time.



8. Policies applicable to the MJDF

Policies relating to appeals, plagiarism and malpractice, disability and equal opportunities will be made available to candidates separately.



Annex A

Specimen Part 1 questions

Specimen single best answer (SBA) questions

Example 1

A 46-year-old male smoker presents as a new patient complaining of bleeding gums, bad breath and a BPE score as follows:

3 1 3 1 4 3

Select the most appropriate initial radiographic examination. (select only 1 of the following)

- A. Bitewings
- B. Bitewings and periapical views of selected teeth
- C. Full mouth periapicals
- **D.** Dental Panoramic Tomograph (DPT)
- **E.** Vertical bitewings

Example 2

A 36-year-old man is involved in a road traffic incident and knocked off his bike. Occlusal radiographs demonstrate a displaced root fracture of the upper left incisor (UL1). Following confirmed radiographic repositioning what is the next most appropriate treatment: (select only 1 of the following)

- leat only 1 of the following)
- A. Fixed splint for 1 weekB. Fixed splint for 4 weeks
- **C.** Flexible splint for 1 week
- D. Flexible splint for 4 weeks
- **E.** Flexible splint for 6 weeks

Example 3

An 86-year-old female on long-term warfarin for AF is found to have an INR of 6.8. She was recently prescribed antibiotics for a periapical abscess. Which antibiotic is most likely to have precipitated this result? (select only 1 of the following)

DIPLOMA OF MEMBERSHIP OF THE JOINT DENTAL FACULTIES at The Royal College of Surgeons of England



- A. Amoxicillin
- B. Benzyl Penicillin
- C. Co-amoxiclav
- **D.** Eythromycin
- E. Metronidazole

Example 4

A 20-year-old woman complains she has discolouration of her upper anterior teeth. On examination she has mild fluorosis of the upper incisors including some brow/yellow marks. Which one of the following would be the most appropriate initial management? (select only 1 of the following)

- A. Ceramic veneers
- **B.** Direct composite veneers
- **C.** Full coverage porcelain bonded to metal crowns
- **D.** Home bleaching
- E. Microabrasion

Example 5

Which one of the following would be the most appropriate flap design when performing an apicectomy on a root-treated and post-crown restored upper second premolar tooth? (select only 1 of the following)

- A. Envelope
- B. Gingival margin sparing
- C. Semi-lunar
- **D.** Three-sided
- E. Two-sided



Specimen Part 2 questions

Example 1

Candidate instructions

Read the clinical scenario below and review the dental panoramic tomogram (Figure 1).

Consider both the immediate and long term management of this patient.

Clinical Scenario

A 26-year-old female patient, with a history of lower right third molar pericoronitis attends as an emergency patient at your practice.

She tells you that "the gum around her wisdom tooth began swelling two days ago and the swelling and pain has been getting worse". She says "I have been taking a lot of paracetamol since the infection began, but the benefit is only transient".

Examination shows she has a temperature of 37.8°C, right submandibular lymphadenopathy and acute pericoronitis associated with the lower right third molar.

Further information:

- Her medical history is unremarkable.
- She has no known allergies and is taking no long term medications.
- She has never smoked tobacco.
- She has been assessed as very low risk dentally, having had some posterior composite and amalgam restorations and orthodontics as a teenager.
- The upper right third molar tooth was removed three months ago under local anaesthesia, the last time she had pericoronitis on this side.
- She is engaged to be married in a year's time and is planning a long honeymoon visiting the southern hemisphere islands over a three month period.
- She is a professional actor.
- Her elder sister has recently been diagnosed with multiple sclerosis.



Figure 1

Dental Panoramic Tomogram showing the right mandible and maxilla





Introduction

You have read the scenario and looked at the radiograph. I will ask questions followed by my colleague.

Examiner 1

- 1. What would be your first line-management of this patient?
- 2. Please describe what you can see on the Dental Panoramic Tomogram.
- 3. Which guidelines relate to the longer term management of this patient and what are the main reasons to extract lower third molar teeth?
- 4. What does informed consent mean?
- 5. What would you discuss when obtaining informed consent for the removal of the lower right third molar?
- 6. Is the lower right third molar tooth closely associated with the inferior alveolar canal?
 - What radiographic clues did you look for?
 - What is the percentage risk of damage to the inferior alveolar nerve if the tooth was closely associated?
- 7. Please describe the principles of third molar coronectomy. What are the risks and benefits?

Examiner 2

- 8. When the patient attends to review the DPT she discusses her fears of developing multiple sclerosis, like her sister. How would you explain to the patient that replacing her amalgam restorations with a different material was not necessary?
- 9. She tells you several countries have already banned amalgam fillings. How accurate is this and is there any guidance available for the UK?
- 10. Is mercury toxicity associated with amalgam restorations?
- 11. How would you minimise mercury levels in your practice?
- 12. Whilst administering an inferior alveolar nerve block to anaesthetise the third molar for removal, the needle breaks. What should you do?
- 13. What steps can you take to minimise the risk of needle fracture?



Example 2

Candidate instructions

You are the practice principle and have been asked to carry out a clinical audit feedback meeting with one of your associate dentists (Tom Morgan).

The clinical audit results are as follows:

	Unacceptable radiographs (%)	Acceptable radiographs(%)	Excellent radiographs(%)
Target Standard Set	<10	<20	>70
Team excluding Tom Morgan mean results	8	17	75
Whole team's mean result	12	21	67
Tom Morgan's results	20	25	55

Your task is to conduct this feedback session with 'your' associate (represented by a role player) regarding his Radiology standards.



Annex B

Frequently asked questions

What is the value of the MJDF measured against the old qualifications?

One of the defining characteristics of the MFDS was that it served as an entry requirement for specialist training. The GDC has decided that there will be no formal examination entry requirement, and selection is likely to be on the basis of a range of criteria demonstrating suitability. Possession of a postgraduate qualification (MFDS, MFGDP(UK), MJDF, or a non-College qualification) will play a part in demonstrating a candidate's suitability. However, it is not an absolute requirement.

The MJDF's purpose and value is to confirm the acquisition of competencies at the end of the foundation training curriculum, for a dental career which may develop within either primary or secondary care.

I want to enter specialist training. Do I also need MJDF in addition to my existing MFDS/MFGDP(UK)?

See above – in keeping with published GDC guidance, this is not currently a mandatory requirement.

Since the MJDF assesses competencies in the foundation training curriculum, is it relevant to a practitioner with several years' experience post-qualification?

Yes – the MJDF will be the starting point for dentists who wish to develop their careers in a number of ways. With more flexible entry into specialist training, and the advent of concepts such as Dentists with Special Interests, all practitioners should consider the MJDF as a valuable demonstration of having achieved the postgraduate competencies set out in the foundation training curriculum.

I have completed MFDS/MFGDP(UK). Can I use this to obtain exemptions from parts of the MJDF?

If you have completed MFDS or MFGDP(UK), you need only take Part 2 MJDF to gain that award, as long the components for which you are claiming credit and Part 2 of the MJDF are completed within the five-year period allowed by the regulations.



Is MJDF available overseas?

MJDF Part 1 is offered in several overseas centres. For more information please visit the MJDF website www.mjdf.org.uk

How long do I have to complete the MJDF?

All parts of the assessment will normally need to be completed within five years of passing Part 1.

Is the MJDF registerable as an additional qualification with the GDC?

At the time of publication (Sept 2014), the General Dental Council is not accepting new applications for registrable qualifications pending a review of its policy for approving such applications. This applies both to the MJDF and the MFDS of the Dental Faculties of the Royal Colleges in Scotland. On completion, the faculties will apply to the GDC for recognition as a qualification.

Where do I obtain further information and guidance?

Visit www.mjdf.org.uk, or contact the MJDF Examination Department at mjdf@rcseng.ac.uk.



Annex C

MJDF resource list

This list of resources covers the curriculum domains of the foundation training curriculum. As such it is intended as a guide to where to obtain the necessary information should candidates wish to enhance their existing knowledge.

Candidates should use this selectively: It is not a list of all resources that must be learnt or indeed all that are available.

Candidates should be aware that it is their personal responsibility to ensure that their knowledge is up to date, and that they are aware of contemporary developments and issues in dental treatment.

I. Textbooks

1 Underpinning Life Sciences

1.1 Anatomy

- Dalley AF, Agur AMR et al. (eds) Clinically Oriented Anatomy
- Agur et al. Grant's Atlas of Anatomy 13th ed. 2012 Lippincott, Williams & Wilkins
 - Publisher: Lippincott Williams and Wilkins; 13th Revised ed (22 Feb 2012)
- Atkinson ME Anatomy for dental students 4th ed. OUP Oxford Anatomy for Dental Students Paperback 4th ed (14 Mar 2013)

1.2 Biochemistry

Baynes & Dominiczak Medical biochemistry 4th ed. 2014Mosby

1.3 Histology

- Kerr Functional histology 2nd ed. 2010 Mosby
- Berkovitz et al. Oral anatomy, histology and embryology 4th ed. 2009 Mosby
- Nanci & Ten Cate Ten Cate's oral histology: development, structure, and function 8th ed. 2013 Elsevier

1.4 Microbiology

- Bagg et al. Essentials of microbiology for dental students 2nd ed. 2006
 Oxford Univ. Press
- Marsh & Martin Oral microbiology 5th ed. 2009 Elsevier



1.5 Pathology

- General Pathology Cross Underwood's pathology: a clinical approach 6th ed. 2013 Churchill Livingstone
- Muir & Levison Muir's textbook of pathology (15th ed, 2014) Hodder Arnold
- Male Immunology: an illustrated outline 5th ed. 2014 Garland Science

1.6 Physiology

- Master in Dentistry, Berkovicz and Linden
- Sherwood Introduction to human physiology: from cells to systems 8th ed. 2012 Brooks/Cole

2 Clinical

2.1 Children's Dentistry

- Welbury et al. Paediatric dentistry 4th ed 2012 Oxford Univ. Press
- Chadwick & Hosey Child taming: how to manage children in dental practice 2003 Quint-essence
- Andreasen et al Traumatic dental injuries : a manual 3rd ed. 2011 Wiley Blackwell

2.2 Clinical Medical Sciences

- Greenwood et al. Textbook of human disease in dentistry 2009 Wiley-Blackwell
- Scully Medical problems in dentistry 7th ed. 2014 Churchill Livingstone

2.3 Dental Materials Sciences

McCabe & Walls Applied dental materials 9th ed. 2008 Blackwell

2.4 Dental Public Health

- Daly et al. Essential dental public health 2nd ed. 2013 Oxford Univ. Press
- Burt & Eklund Dentistry, dental practice, and the community 6th ed.
 2005 Elsevier

2.5 Dental Sedation

- Meechan et al. Pain and anxiety control for the conscious dental patient 1998 Oxford Univ. Press
- Girdler & Hill Sedation in dentistry 1998 Oxford Univ. Press
- Weiner The fearful dental patient: a guide to understanding and managing 2010 Wiley Blackwell

2.6 Endodontics

 Harty's Endodontics in Clinical Practice Text and Evolve eBooks Package, 6th Edition



- Editor: Bun San Chong ISBN: 9780702044625
- Ingle's Endodontics John Ide Ingle, Leif K. Bakland, J. Craig Baumgartner PMPH-USA, 2008 –
- Problem Solving in Endodontics James L. Gutmann, Thom C. Dumsha, et al. Mosby ISBN: 9780323168670

2.7 Fixed Prosthodontics

 Ricketts & Bartlett Advanced operative dentistry: a practical approachn2011 Churchill Livingstone

2.8 Operative Dentistry and Cariology

- Banerjee & Watson Pickard's manual of operative dentistry 9th ed.
 2011 Oxford Univ. Press
- Kidd Essentials of dental caries: the disease and its management 3rd ed. 2005 Oxford Univ. Press
- Fejerskov & Kidd Dental caries: the disease and its clinical management (9th ed. due 2015) 2nd ed. 2008nBlackwell Munksgaard

2.9 Oral Medicine

 Cawson & Odell Cawson's Essentials of oral pathology and oral medicine 8th ed. 2008 Churchill Livingstone

2.10 Oral Pathology

- Soames & Southam Oral Pathology 4th ed. 2005 Oxford Univ. Press
- Cawson & Odell Cawson's Essentials of oral pathology and oral medicine 8th ed. 2008 Churchill Livingstone

2.11 Oral Surgery

- Pedlar & Frame Oral & maxillofacial surgery : an objective based textbook 2nd ed. 2007 Churchill Livingstone
- Moore Principles of oral & maxillofacial surgery 6th ed. 2011 Wiley Blackwell
- Coulthard et al. Master dentistry Vol.1: oral & maxillofacial surgery, radiology, pathology and oral medicine 3rd ed. 2013 Churchill LivingstoneY
- Hupp et al. Contemporary oral & maxillofacial surgery 6th ed. 2013 Mosby

2.12 Orthodontics

- Mitchell An introduction to orthodontics 4th ed. 2013 Oxford Univ. Press
- Cobourne & DiBiase Handbook of Orthodontics 1st ed. 2010 Mosby Elsevier



2.13 Periodontology

- Chapple & Gilbert Understanding periodontal diseases: assessment and diagnostic procedures in practice 2002 Quint-essence
- Eley et al. Periodontics 6th ed. 2010 Saunders
- Lindhe et al. Clinical periodontology and implant dentistry 5th ed. 2008
 Blackwell Munksgaard

2.14 Radiology

- Whaites and Drage Essentials of dental radiography and radiology 5th ed. 2013 Churchill Livingstone
- Whaites and Drage Radiography and radiology for dental care professionals 3rd ed. 2013 Churchill Livingstone

2.15 Removable Prosthodontics

- Basker et al. Prosthetic treatment of the edentulous patient 5th ed.
 2011 Wiley Blackwell
- Tyson et al Understanding partial denture design 2007 Oxford Univ. Press
- Davenport et al. A clinical guide to removable partial dentures 2000 British Dental Association

2.16 Professionalism/Communication/Leadership and Management

- Beauchamp & Childress Principles of biomedical ethics 7th ed. 2013
 Oxford Univ. Press
- D'Cruz Legal aspects of general dental practice 2006 Churchill Livingstone Elsevier
- Rigney The Metaphorical Society: an invitation to social theory 2001 Rowman & Littlefield
- Burke & Freeman Preparing for dental practice 2004 Oxford Univ. Press
- Freeman The psychology of dental patient care: the common sense approach 2000 British Dental Association
- Freeman & Humphris Communicating in dental practice: stress free dentistry and improved patient care 2006 Quint-essence

II. Articles

1 Clinical

1.1 Prevention

 Issues to consider when developing a fluoride strategy Batchelor P. Fac Dent J 2012; 3: 140-145



"...what is the most appropriate strategy for prevention of caries when there are already low levels of caries...?"

Is dental erosion really a problem?
 Schlueter N, Jaeggi T et al. Adv Dent Res 2012; 24:68-71

Stannous (tin) fluoride containing products 'result in a significantly slower progression of erosion' and reduced tooth sensitivity.

Infiltrating/sealing proximal caries lesions: a 3-year randomized clinical trial

Martignon S, Ekstrand KR et al. J Dent Res 2012 91:288-292

Caries progression on proximal surfaces was arrested by both infiltration and sealing.

 Prevention of root caries: a literature review of primary and secondary preventive agents
 Gluzman R, Katz RV et al. Spec Care Dentist 2013;33:133-140

1.2 Fixed and Removable Prosthodontics (occlusion and associations)

Review article: principles of the management of bruxism
 Lobbezoo F, van der Zaag J et al. J Oral Rehabil 2008; 35: 509-523

Bruxism is best managed using the triple-P approach

• Some dogmas related to prosthodontics, temporomandibular disorders and occlusion

Carlsson GE. Acta Odontol Scand 2010; 68: 313-322

'a clash of cultures—between that of the researcher and that of the practitioner.'

Living with uncertainty: temporomandibular disorders
 Durham J, Steele JG et al. J Dent Res 2010; 89:827-830

As uncertainty results in negative impacts for suffers, the diagnosis of TMDs (temporomandibular disorders) 'needs to be encouraged at the first point of contact.'

 Correlation between centric relation—maximum intercuspation discrepancy and temporomandibular joint dysfunction He SS, Deng X et al. Acta Odontol Scand 2010; 68: 368–376

Significantly more young adults had temporomandibular joint dysfunction (TMD), if there was a discrepancy of more than 1 mm between centric relation and maximum intercuspation (CR-MI).

Review Article. Are bruxism and the bite causally related?



Lobbezoo F, Ahlberg J et al. J Oral Rehabil 2012doi: 10.1111/j.1365-2842.2012.02298.

Accuracy of digital and conventional impression techniques and workflow

Seelbach P Brueckel C et al. Clin Oral Investig 2012; DOI 10.1007/s00784-012-0864-4

Crowns constructed after using either digital or conventional impressions methods have comparable accuracy.

- Quantification of residual dentine thickness following crown preparation Davis GR, Tayeb RA et al. J Dent 2012 http://dx.doi.org/10.1016/j.jdent.2012.03.006
- Reliability of reduced-thickness and thinly veneered lithium disilicate crowns Silva NRFA, Bonfante EA et al. J Dent Res 2012; 91:305-310

Metal ceramic crowns would still be considered the 'gold standard'.

 Four-year survival of endodontically treated premolars restored with fiber posts

Juloski J, Fadda GM *et al. J Dent Res* 2014; 93 DOI: 10.1177/0022034514527970

Cox regression analysis showed 'neither the amount of coronal residual structure nor the luting material significantly influenced the failure risk'.

 The effect of one-step vs. two-step impression techniques on long-term accuracy and dimensional stability when the finish line is within the gingival sulcular area

Levartovsky S, Zalis M et al. J Prosthodont 2014: 23; 124–133

All the polyvinyl siloxane impression materials tested met acceptable linear dimensional characteristics as defined by ADA specification.

Cost-effectiveness of silicone and alginate impressions for complete dentures

Hulme C, Yu G et al. J Dent 2014;42:902-907

 A randomised controlled trial of complete denture impression materials Hyde TP, Craddock HL et al. J Dent 2014;42: 895-901

1.3 Periodontology

One-stage full-mouth disinfection versus quadrant and full-mouth root planning

Swierkot K, Nonnenmacher CL et al. J Clin Periodontol 2009;36:240–

All non-surgical treatments showed similar favourable short-term outcomes.



- Systematic review of periodontal plastic surgery in the treatment of multiple recession-type defects Chambrone L, Lima LA et al. J Can Dent Assoc 2009;75:203a-203g www.cda-adc.ca/jcda/vol-75/issue-3/203.html
- Causal assessment of smoking and tooth loss: a systematic review of observational studies

Hanioka T, Ojima M et al. BMC Public Health 2011, 11:221

'Early death in current smokers that have lost more teeth than non-smokers could dilute the effect of smoking in the elderly...'.

 No association between A actinomycetemcomitans or P gingivalis and chronic or aggressive periodontitis diagnosis
 Nibali L, D'Aiuto F et al. Quintessence Int 2012;43: 247-254

Is there is a distinction between chronic periodontitis and aggressive periodontitis and therefore, is there a rationale for different treatment regimens?

 Contesting conventional periodontal wisdom: implications for periodontal classifications
 López R, Baelum V. Community Dent Oral Epidemiol 2012; 40:385–395

A 'useful periodontal classification should be determined by documented differences in the management of each entity'.

 Azithromycin in periodontal treatment: more than an antibiotic Hirsch R, Deng H et al. J Periodontal Res 2012; 47: 137–148

> A 'profligate use' of antibiotics or the preferred treatment for those with 'low plaque scores and low responsiveness to periodontal therapy.'

 Is self interdental cleaning associated with dental plaque levels, dental calculus, gingivitis and periodontal disease?
 Crocombe LA, Brennan DS et al. J Periodontal Res 2012; 47: 188–197

No association between self interdental cleaning and clinical attachment loss.

1.4 Implant dentistry

 Implant overdentures and nutrition: a randomized controlled trial Awad MA, Morais JA et al. J Dent Res 2012; 91:39-46

No improvement, if not a deterioration, in the nutrition of those subjects who had been restored with mandibular implant overdentures (IOD).

 Hierarchical decisions on teeth vs. implants in the periodontitissusceptible patient: the modern dilemma
 Donos N, Laurell L et al. Periodontol 2000 2012;59:89–110



"...survival data on implants primarily relate to implant systems that are no longer available."

 Current perspectives on the role of ridge (socket) preservation procedures in dental implant treatment in the aesthetic zone Kassim B, Ivanovski S et al. Aust Dent J 2014; 59: 48–56

Grafting materials placed into extraction sockets delay healing

 Oral rehabilitation with dental implants in irradiated patients: a metaanalysis on implant survival Schiegnitz E, Al-Nawas B et al. Clin Oral Invest 2014 18:687–698

1.5 Dento-alveolar surgery

 Should warfarin be discontinued before a dental extraction? A decisiontree analysis

Balevi B. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2010;110:691-697

Balancing true and perceived risks.

 Bisphosphonate osteonecrosis of the jaw - a literature review of UK policies versus international policies on bisphosphonates, risk factors and prevention

Patel V, McLeod NMH et al. Br J Oral Maxillofac Surg 2011;49: 251–257

As BONJ is potentially catastrophic, 'any measures (such as prophylactic antibiotics before dento-alveolar surgery) which may be beneficial should be considered

Protocol in managing oral surgical patients taking dabigatran
 Breik O, Cheng A et al. Aust Dent J 2014; 59: 296–301

Compared with warfarin, dabigatran '...allows a fixed dose regimen in most patients without the need for routine monitoring of anticoagulant effect.'

1.6 Endodontics

 Shrinkage of backfill gutta-percha upon cooling Lottanti S, Tauböck TT et al. J Endod 2014;40:721–724

Can sealers '...compensate for the fast and massive shrinkage upon cooling of the gutta-percha core material during thermoplastic obturation...'?

 The effect of immediate and delayed post-space preparation using extended working time root canal sealers on apical leakage Chen G, Chang YC. J Dent Sci 2013;8: 31-36



Even when using an extended working time (EWT) sealer, postspaces can be prepared immediately following root canal obturation.

 Nonendodontic lesions misdiagnosed as apical periodontitis lesions: series of case reports and review of literature Corrêa Pontes FSC, Fonseca FP et al. J Endod 2014;40:16–27

A diffuse multilocular appearance, a moth-eaten radiolucency, the sunray appearance, the Codman triangle (new subperiosteal bone, after the periosteum has been raised), 'floating teeth', pain or paraesthesia should each raise suspicion

1.7 Cosmetic Dentistry

 Advances in non-surgical facial aesthetics Pickett A. Fac Dent J 2012; 3: 184-190

Botulinum toxin (BoNT) to facilitate 'muscle relaxation', in combination with a 'light' filler for 'dermal treatment' and a 'heavy' filler for 'lifting capacity'.

 Clinical evaluation of the effectiveness of different bleaching therapies in vital teeth

do Amaral Gonzaga de Almeida, Riehl H et al. Int J Periodont Restor Dent 2012:32: 303-309

No difference in tooth whitening between in-office bleaching and home-bleaching.

 Comparison of dental esthetic perceptions of young adolescents and their parents

Kavand G, Broffitt B *et al. J Public Health Dent* doi: 10.1111/j.1752-7325.2011.00306.x

Fluorosis in over one quarter of 13-year-olds who grew up in an area with water fluoridation.

1.8 Children and Orthodontics

 Should deciduous teeth be restored? Reflections of a cariologist Kidd E. Dent Update 2012; 39: 159–166

Micro-organisms stressed and entombed

- Characteristics of child dental neglect: a systematic review Bhatia SK, Maguire SA et al. J Dent 2014; 42: 229-239
 - "...differentiating dental caries from dental neglect is difficult..."
- National clinical guidelines for the extraction of first permanent molars in children. Cobourne MT, Williams A, Harrison M. Br Dent J. 2014; 217:643-648



- Root resorption after orthodontic treatment: Part 1. Literature review. Brezniak N, Wasserstein A. Am J Orthod Dentofacial Orthop. 1993; 103:62-66
- Root resorption after orthodontic treatment: Part 2. Literature review.
 Brezniak N, Wasserstein A. Am J Orthod Dentofacial Orthop. 1993
 Feb;103(2):138-146
- National clinical guidelines for management of the palatally ectopic maxillary canine. Husain J et al., Clinical Standards Committee of the Faculty of Dental Surgery, Royal College of Surgeons of England. Br Dent J. 2012;213:171-176
- Early treatment for Class II Division 1 malocclusion with the Twin-block appliance: a multi-center, randomized, controlled trial. O'Brien K, et al. Am J Orthod Dentofacial Orthop. 2009;135:573-579
- The development of an index of orthodontic treatment priority. Brook PH, Shaw WC. Eur J Orthod. 1989 1:309-320.
- Prevalence of hypodontia and associated factors: a systematic review and meta-analysis. Khalaf K, Miskelly J, Voge E, Macfarlane TV. J Orthod. 2014:41:299-316.
- Dental transposition as a disorder of genetic origin. Ely NJ, Sherriff M, Cobourne MT. Eur J Orthod. 2006;28:145-151.
- Management of unerupted maxillary incisors. Yaqoob et al. Faculty of Dental Surgery, Royal College of Surgeons of England 2010:1-13
- Interceptive orthodontics--current evidence-based best practice. Borrie F, Bearn D. Dent Update. 2013;40: 442-4, 446-8, 450.
- The clinical features and aetiological basis of primary eruption failure. Ahmad S, Bister D, Cobourne MT. Eur J Orthod. 2006;28:535-540.

1.9 Four Os and Radiology

- Recognising skin cancers in the dental patient Newlands C. Fac Dent J 2012; 3: 158-165
 - "...the incidence of all forms of facial skin cancers is at least 20 times that of oral squamous cell carcinoma"
- Sleep bruxism increases the risk for painful temporomandibular disorder, depression and non-specific physical symptoms Fernades G, Franco AL et al. J Oral Rehabil 2012; 39: 538–544

Associations between sleep bruxism, TMD and depression.

 Stimulating the discussion on saliva substitutes: a clinical perspective Dost F, Farah CS. Aust Dent J 2013;58:11–17

'There is no strong evidence that any topical therapy is effective to relieve the symptoms of dry mouth'. Cochrane Database of Systematic Reviews.;12():CD008934

Urban legends series: oral manifestations of HIV infection
 Patton LL, Ramirez-Amador V et al. Oral Dis 2013; 19: 533–550



- "...lack of evidence that HIV-OLs (HIV oral lesions) may represent manifestations of IRIS" (immune reconstitution inflammatory syndrome).
- Oral cancer screening for asymptomatic adults: do the United States Preventive Services Task Force draft guidelines miss the proverbial forest for the trees?

Edwards PC. Oral Surg Oral Med Oral Pathol Oral Radiol 2013;116:131-4

Cancers 'detected at an earlier stage through screening examinations may inherently have less aggressive biologic potential' and this maybe the reason for improved survival

 Plaque control improves the painful symptoms of oral lichen planus gingival lesions. A short-term study Salgado DS, Jeremias F et al. J Oral Pathol Med 2013; 42: 728–732

This study supports recommendations (www.bsom.org.uk/LP_guidelines_-_BSOM.pdf) that plaque control has a role in management of patients with oral lichen planus of the gingiva.

Regression of oral lichenoid lesions after replacement of dental restorations

Mårell L, Tillberg A et al. J Oral Rehabil 2014; 41: 381-391

Patch test for dental materials is of limited value.

1.10 Medical Dental interfaces

 The 21st century hazards of smoking and benefits of stopping: a prospective study of one million women in the UK Pirie K, Peto R et al. www.thelancet.com 2012 http://dx.doi.org/10.1016/S0140-6736(12)61720-6

There is little if no 'excess mortality' from smoking in women that quit before 30 years of age

 Association of all-cause mortality with overweight and obesity using standard body mass index categories. A systematic review and metaanalysis

Flegal KM, Kit BK et al. JAMA. 2013; 309: 71-82

- '...lower mortality among overweight and moderately obese patients' but higher mortality for those with a BMI >35'
- Male vaccination against human papillomavirus Salisbury DM. Lancet Infect Dis 2012;12: 82-3

HPV vaccination of boys would appear unnecessary

 Real-world effectiveness of e-cigarettes when used to aid smoking cessation: a cross-sectional population study



Brown J, Beard E et al. Addiction 2014: doi: 10.1111/add.12623

'I am still not smoking'; e-cigarettes were more effective than NRT or no aid.

Protocol in managing oral surgical patients taking dabigatran
 Breik O, Cheng A et al. Aust Dent J 2014; 59: 296–301

Compared with warfarin, dabigatran '...allows a fixed dose regimen in most patients without the need for routine monitoring of anticoagulant effect.'

2 Professionalism

 The numeric threshold for the disclosure of risk: outdated and inapplicable to surgical consent Wheeler R. Ann R Coll Surg Engl 2012; 94: 81-82

"...only the patient can judge what risk is material to him or her, irrespective of its frequency of occurrence", yet a dentist should demonstrate perspicacity.

- Dire necessity and transformation: entry-points for modern science in Islamic bioethical assessment of porcine products in vaccines Padela AI, Furber SW et al. Bioethics doi:10.1111/bioe.12016
- Request for treatment: the evolution of consent Shokrollahi K. Ann R Coll Surg Engl 2010;92: 93-100

The 'symbolic act of signing a consent form' is just that

Report of the independent panel considering the retraction of two BMJ papers

journals.bmj.com/.../bmj/.../Final%20report%20of%20the%20independent...

'It is not surprising the BMJ investigates itself and exonerates itself.' Professor Sir Rory Collins.

 The art of medicine. The art of the demographic dividend O'Neill D. The Lancet 2011 DOI:10.1016/S0140-6736(11)60612-0

The author cites Susan Sontag who wrote: 'Everyone who is born holds dual citizenship, in the kingdom of the well and in the kingdom of the sick'.

- Against homeopathy a utilitarian perspective Smith K. Bioethics doi:10.1111/j.1467-8519.2010.01876.x
 - "...a medical tool gains moral content if by its intrinsic nature it is ineffective". Homeopathy is therefore not morally neutral.
- Placebo use in the United Kingdom: results from a national survey of primary care practitioners Howick J, Bishop FL et al. PLoS ONE 2013;18:e58247. doi:10.1371/journal.pone.0058247



The implications of the final sentence 'Further investigations are warranted to develop ethical and cost-effective placebos' require careful examination

 Newsdesk - Elimination on the agenda for hepatitis C Burki T. Lancet Infect Dis 2014; http://dx.doi.org/10.1016/S1473-3099(14)70704-2

> Yet for many countries, sofosbuvir is prohibitively expensive with one tablet costing \$1000 and a course requiring a daily tablet for 12 weeks

Confidence and conflicts of duty in surgery
 Coggon J, Wheeler R. Ann R Coll Surg Engl 2010; 92: 113–117

Confidentiality is founded on 'the need for 'reciprocal confidence'...

Medical manslaughter: a recent history
 Edwards S. Ann R Coll Surg Engl (Suppl) 2014; 96:118–119

For the dental implications of the overarching Corporate Manslaughter and Corporate Homicide Act 2007 see *Brit Dent J* 2008; 204: 497-502.

3 Communication

Emotional intelligence of dental students and patient satisfaction
 Azimi S, AsgharNejad Farid AA et al. Eur J Dent Educ 2010 14: 129–132

'Emotional intelligence' ('array of personal, emotional and social competencies that enables one to cope with environmental demands') is a purported attribute that has used in the commercial sector

 Reassurance and distress behavior in preschool children undergoing dental preventive care procedures in a community setting: a multilevel observational study

Zhou Y, Humphris GM. *Ann Behav Med* DOI 10.1007/s12160-013-9566-7

Young children receiving verbal reassurance during fluoride varnish application promotes distress

 UK population norms for the modified dental anxiety scale with percentile calculator: adult dental health survey 2009 results Humphris G, Crawford JR et al. BMC Oral Health 2013;13:29 www.biomedcentral.com/1472-6831/13/29

Free calculator to provide a read out for a patient's dental anxiety score (www.st-andrews.ac.uk/dentalanxiety/).



4 Leadership and Management

Wrong tooth extraction: root cause analysis
 Peleg O, Givot N et al. Quintessence Int 2010;41: 869-872

In order to avoid extracting the wrong tooth, not only should there be clear communication with the referring colleague, but the patient must be told which tooth is to be extracted

Social determinants and dental health
 Marmot M, Bell R. Adv Dent Res 2011;23:201-206

'Proportionate universalism'

 When an organisation fails: lessons from Stafford and beyond Idle M, Speculand B. Fac Dent J 2012; 3: 134-138

> Both organisations were driven by targets and failed in their duty of care to vulnerable people. The culture was that of arrogance with little accountability

- Modernisation of HIV rules to better protect public https://www.gov.uk/government/.../modernisation-of-hiv-rules-to-better
 Page history: published 15 August 2013
- A deviation from standard design? Clinical trials, research ethics committees and the regulatory co-construction of organizational deviance

Hedgecoe A. Social Stud Sci DOI: 10.1177/0306312713506141

"...the TGN1412 trial echoes other cases of the normalization of deviance, most obviously the Challenger launch decision, in which actions that appeared deviant to outsiders after the accident were normal and acceptable...".

 The surgeon and medical devices: adverse incident reporting and offlabel use

Lennard N, Coutinho M et al. Ann R Coll Surg Engl 2013; 95: 309–310

There is an ethical obligation to share with patients off-label use and this should be documented in the clinical notes, although there is no requirement to inform the Medicines and Healthcare products Regulatory Agency (MHRA).

 From deep-fried Mars bars to neoliberal political attacks: explaining the Scottish mortality disadvantage (editorial)
 Mackenbach JP. Eur J Public Health 2012; 22:751

> ...it is proposed that 'a neoliberal "political attack" by the Conservative government in the 1980s resulted in greater inequalities in Scotland compared with the rest of the UK, with accompanying unhealthy lifestyles for the disenfranchised

Access to data in industry-sponsored trials



Lundh A, Krogsbøll LT *et al.* www.the lancet.com 378:1995-1996 (correspondence)

This is all particularly apposite, as in a recent Cochrane review it was stated that despite five requests to F. Hoffmann–La Roche, this manufacturer would not release all the data pertaining to the efficacy of Tamiflu.

The ethical imperative of addressing oral health disparities: a unifying framework

Lee JY, Divaris K. J Dent Res 2014;93:224-230

- '...empowerment of communities via increased opportunities for education, child care, employment, community building and economic revitalization, and housing can help close the oral health disparities.'
- A new model of social class: findings from the BBC's Great British Class Survey Experiment Savage M, Devine F et al. Sociol DOI: 10.1177/0038038513481128

A new approach embracing 'cultural and social boundaries'.

Economics of periodontal care: market trends, competitive forces and incentives

Flemmig TF, Beikler T. Periodontol 2000 2013; 62: 287–304

5 Statistics

 Pellicle and early dental plaque in periodontitis patients before and after surgical pocket elimination
 Rüdiger SG, Dahlén G et al. Acta Odontol Scand 2012;70:615-621

"...a prima facie conclusion may be invalid because of the confounding effects of uncontrolled variables." The Design and Analysis of Research Studies. Manly BFJ (ed) ISBN:9780521425803

 Investigating clinical heterogeneity in systematic reviews: a methodologic review of guidance in the literature Gagnier JJ, Moher D et al. BMC Medical Research Methodology 2012, 12:111

http://www.biomedcentral.com/1471-2288/12/111

 Periodontitis and systemic diseases: consensus report of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases Linden GJ, Herzberg MC and on behalf of working group 4. *J Clin* Periodontol 2013; 40 (Suppl. 14): S20–S23. doi: 10.1111/jcpe.12091

Causation or common risk factors



Useful websites

- British Dental Association (BDA) <u>http://www.gdc-uk.org</u>
- British Dental Journal www.nature.com/bdj
- British Orthodontic Society www.bos.org.uk
- Care Quality Commission (CQC) <u>http://www.cqc.org.uk/</u>
- Dental Defence Union (DDU) www.theddu.com
- Dental Elf http://www.thedentalelf.net/
- Dental Protection www.dentalprotection.org/uk
- Dental Trauma Guide website www.dentaltraumaguide.org
- Dentistry & Oral Health The Cochrane Library
 http://www.thecochranelibrary.com/view/0/browse.html?cat=ccochdentistry
 oralhealth
- Dentists Health Support Programme
 http://sick-doctors-trust.co.uk/page/dentists-health-support-programme-helpline
- Faculty of Dental Surgery (FDS) http://www.rcseng.ac.uk/fds
- Faculty of General Dental Practice (FGDP)
 http://www.fgdp.org.uk/
- FGDP, Standards in Dentistry http://www.fgdp.org.uk/publications/standardsindentistryonline.ashx
- Francis Report http://www.midstaffspublicinquiry.com/



- General Dental Council (GDC) http://www.gdc-uk.org
- National Clinical Assessment Service (NCAS) http://www.ncas.nhs.uk/
- National Institute for Health and Care Excellence (NICE) http://www.nice.org.uk/
- Scottish Dental Clinical Effectiveness Programme (SDCEP) http://www.sdcep.org.uk/
- The Medical and Dental Defence Union of Scotland www.mddus.com
- The Royal College of Surgeons of *England* (RCS Eng) http://www.rcseng.ac.uk/
- The Scottish Intercollegiate Guidelines Network (SIGN) http://www.sign.ac.uk/