

Questions and Answers and Guidelines in EBD Volume 5

Derek Richards

Editor, Evidence-based Dentistry

In the previous years, we have outlined the questions and answers addressed by summaries in EBD^{1,2}. Here we list the two guidelines, 39 questions, answers and evidence levels of areas addressed in EBD volume five. Evidence levels³ are only given for those papers achieving level 3A and above.

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Guidelines

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How to ensure pain relief for patients with apical periodontitis?	7
How to ensure pain relief for patients with acute apical abscess?	8

Question	Answer	Evidence level	Page
Caries			
Are topical fluoride treatments (toothpastes, mouthrinses, gels or varnishes) effective in reducing dental caries in children and adolescence?	Children and adolescents benefit from topical fluorides irrespective of water fluoridation or other sources of fluoride exposure.	1A	36–37
For the prevention of caries in children is there a beneficial effect of adding topical fluoride therapy (TFT) in the form of mouthrinse, gel or varnish to fluoride toothpaste?	Topical fluorides (mouthrinses, gels, or varnishes) used in addition to fluoride toothpaste achieve a modest reduction in caries compared to toothpaste used alone.	1A	38
Does the use of a pacifier increase the risk of early childhood caries?	There is a clear need to improve the quality of research in order to discover any association between pacifier use and childhood caries.	2B	44
What are the trends in dental caries prevalence and severity in Latin America and the Caribbean?	This study showed some statistically significant downward trends in dental caries between 1970 and 2000 in 16 countries in Latin America and the Caribbean.		68
How effective are fissure sealants in preventing occlusal caries in children and adolescents?	Resin-based sealants have a caries-preventive effect but more high-quality clinical trials are needed.	1A	92
Are pit and fissure sealants effective in preventing decay in children and adolescents who are at risk of caries?	Sealants based on resins are effective for prevention of caries on occlusal surfaces of permanent molars. There is insufficient evidence to support the long-term routine use of sealants based on GI.	1A	93–94
Is fluoride gel effective at preventing caries in low caries-risk children?	Although this study provides evidence of a significant beneficial effect of fluoride gel treatment in the permanent teeth of young children at low risk of caries, the clinical relevance is considered low based on the large NNTs obtained from the trial.	1B	95
Dental Public Health			
Are dental Health educators in general practice clinically and cost effective in improving oral health?	This study showed no benefit to dental health but there were improvements in knowledge, attitudes and toothbrushing skills.	1B	15
Is there an association between water fluoridation and Down's syndrome?	The practitioner should be aware of any possible adverse effects of fluoridation but there is no conclusive evidence of association between water fluoridation and Down's syndrome.		39
Does the use of bitewing radiographs provide additional benefit over clinical examination alone when assessing caries prevalence in populations of young people?	There is insufficient evidence at present to indicate the additional diagnostic yield from using bitewing radiographs in an epidemiological study of specific populations.		72

Endodontics

In patients requiring apicectomy and retrograde obturation, which filling material is most effective? Based on the outcome of two RCTs glass ionomer is as effective as amalgam. Therefore, at present the evidence is not strong enough to recommend a move from amalgam. 1A 12

Implants

What complications are associated with dental implants? It was not possible to calculate an overall incidence of complications for implant prostheses because there were no multiple clinical studies that simultaneously evaluated all or most of the categories of complications. 70–71

Methodology

What is the quality of systematic reviews in dentistry? Although the increase in availability of systematic reviews in dentistry is welcome, care needs to be taken to ensure that these reviews are well conducted and clinically relevant. 17

Oral Cancer

Are screening programmes effective in reducing mortality rates from oral cancer? No evidence to support or refute the use of visual screening as a method of screening for oral cancer? 1A 40–41
 Are there any health risks associated with smokeless tobacco? Chewing betel quid and tobacco is associated with a substantial risk of oral cancers in India. Most recent studies from the US and Scandinavia are not statistically significant, but moderate positive associations cannot be ruled out due to lack of power. 79

Oral Medicine

In people at increased risk of bacterial endocarditis does prophylactic penicillin before invasive dental procedures affect mortality, serious illness or endocarditis incidence? There is no evidence about whether penicillin prophylaxis is effective or ineffective against bacterial endocarditis in people at risk who are about to undergo an invasive dental procedure. 46
 Are oral appliances effective in the treatment of sleep apnoea in adults? Oral appliances should be the first choice of treatment. They are feasible alternatives for patients who cannot be managed with nasal continuous positive airway pressure. 1A 76

Oral Surgery

Does hypotensive anaesthesia reduce blood loss in orthognathic surgery? This study provides evidence of reduced blood loss with hypotensive surgery but the case for routine use has not yet been made convincingly 1B 16
 Does the presence of third molars increase the risk of fracture of the mandibular angle? The presence of a lower third molar increases the risk of an angle fracture of the mandible. 78

Orthodontics

For patients requiring orthodontic treatment are outreach clinics an effective way of delivering services? There do not appear to be any marked advantage or disadvantage in providing consultation appointments for orthodontics in outreach clinics 1B 13
 Do postal reminders reduce non-attendance in patients invited to an orthodontic clinic? Postal reminders can improve attendance but more research is required into a range of effective strategies for improving outpatient attendance. 1B 14
 Do functional appliances enhance mandibular growth in the treatment of skeletal Class II malocclusions? Functional appliances can correct significant Class II malocclusions, but this study was unable to conclude whether functional appliances enhance mandibular growth. 1A 74
 Does traditional orthodontic treatment change the prevalence of temporomandibular disorder? Current evidence shows no definite link between orthodontics and TMD but more research is required. 1A 75
 Is the Jones Jig an effective method of distalising upper first permanent molars? It is suggested that there is no advantage in using the Jones Jig as a non-compliance appliance. 2B 77
 Is there any difference between pre-coated and non-pre-coated brackets with respect to bond failure rate and clinical time to place brackets? Neither the precoated nor the non-pre-coated brackets evaluated were clinically superior in terms of bond failure rate in the first six months of fixed appliance treatment. The use of pre-coated brackets did not result in a significant reduction upon clinical bonding time. 1B 104

What is the effect of fluoridated elastomers on the quantity of disclosed dental plaque surrounding an orthodontic bracket?	Fluoridated elastomers do not affect the quantity of disclosed plaque but may help control enamel demineralisation.	1B	96
What is the most effective method of preventing white spot lesions during orthodontic treatment?	For orthodontic patients undergoing fixed appliance therapy, oral hygiene measures should include toothbrushing with fluoridated toothpaste, augmented by daily application of high fluoride concentration gel or chlorhexidine mouthwash. The efficacy of fluoride release from bonding materials or elastomers in reducing decalcification is unverified as yet.	1A	97
In patients undergoing orthodontic treatment is fluoride effective in preventing white spot lesions?	Local fluoride delivery during orthodontic treatment reduces white spot lesions; however, more evidence is needed on the best delivery method.	1A	98–99
Does treatment started before adolescence, when followed by a second phase of treatment in the early permanent dentition, provide superior results to single-phase treatment delayed until adolescence?	There are currently very few indications to justify early treatment for Class II malocclusions. ● Early treatment of Class II malocclusions is effective, but not efficient. ● The difference in skeletal and dental morphology achieved in early treatment disappeared almost completely after comprehensive treatment with fixed appliance was completed.	1B	100–101
Is the Twin-block orthodontic appliance effective in the early treatment of the developing Class II Division 1 malocclusion?	Skeletal change is not clinically significant, but the twin-block appliance is effective in reducing the overjet and severity of malocclusion.	1B	102–103
Does the Herbst appliance have any effect on temporomandibular joint morphology?	More research is required to better understand the effects of the Herbst appliance on TMJ morphology.	2B	105
What is the best method of stabilising tooth position after orthodontic treatment?	There are insufficient research data on which to base our clinical practice on retention at present.	1A	106
Pain			
Is the third molar pain model different from other models and does it effect analgesic response?	Post-surgical pain in different areas of the body appears to be similar in terms of sensitivity to non-narcotic analgesics. Therefore, dentists can rely on summary tables produced using several models of acute surgical pain.	1A	42
Periodontology			
Is local delivery of tetracycline an effective option in the treatment of chronic periodontitis?	Local delivery agents should be used as an adjunct and not an alternative to mechanical therapy in the treatment of periodontal diseases.	1A	67
Is periodontal disease associated with cardiovascular disease?	There is insufficient evidence to suggest that periodontal disease screening and periodontal treatment in people at risk for CVD would reduce the incidence of CVD.	3A	69
Is unsupervised use of a triclosan/copolymer dentifrice effective in slowing the progression of periodontal disease in a normal adult population?	In normal adult population, unsupervised use of a triclosan/copolymer dentifrice tended to slow progression of periodontal disease.	1B	107
Restorative Dentistry			
When patients' anterior teeth are stained, is direct or indirect veneer restoration most effective?	Patients should be advised that there is no 'best' type of veneer.	1A	43
In patients with endodontically treated premolars are full cast crowns more effective than direct composite restorations?	Endodontically treated teeth with minimal loss coronal structure may be restored with adhesion techniques.	2B	45
How long do IPS-Empress ceramic restorations last?	IPS-Empress inlay, onlays and anterior crowns show good survival in the short term. Comparative studies are needed to determine if they are the best restoration for a particular tooth.		73
Temporomandibular Dysfunction			
Is stabilisation splint therapy effective in reducing symptoms in people who have pain dysfunction syndrome?	Until we have further evidence the practitioner can assist the patient by regarding stabilisation splint therapy as an interesting reversible treatment modality and part of symptomatic treatment.	1A	65–66

1. Lawrence A, Richards D. Questions answered in EBD Volumes 1 and 2. Evidence-Based Dent 2002; 3:27–29.

2. Richards D. Questions and Answers in EBD Volumes 3 and 4. Evidence-Based Dent 2003; 4:94–97.

3. Richards D. Not all evidence is created equal — so what is good evidence. Evidence-Based Dent 2003; 4:17–18.