

Rad: TÅ 23

Tillstånd: Ofullständigt rotfylld tand utan apikal parodontit med exponerat rotkanalssystem när protetisk behandling planeras.

Åtgärd: Revisionsbehandling följt av protetisk behandling med (intraradikulärt) stift.

Beskrivning av tillstånd och åtgärd

En person med en rotfylld tand utan apikal förändring där protetisk behandling med intraradikulärt stift planeras. Röntgenundersökning visar inga tecken på periapikal parodontit men att rotfyllningen är ofullständig (otät, för tunn, för kort eller saknas). Åtgärden är revision, det vill säga att göra om den befintliga rotfyllningen, innan preparation och cementering av ett intraradikulärt stift.

Vilken effekt har åtgärden?

Det saknas studier för att kunna bedöma effekterna av revision av en ofullständigt rotfylld tand utan periapikal parodontit jämfört med ingen revision, avseende apikala förhållanden och tandöverlevnad efter protetisk behandling med intraradikulärt stift.

Har åtgärden några biverkningar eller oönskade effekter?

- Åtgärden innebär inga kända biverkningar eller oönskade effekter.
- Det saknas information i studierna om biverkningar eller oönskade effekter.
- Ja. Vid en revision kan oönskade effekter uppstå som perforation av roten eller smärta på grund av infektion.

Vilka studier ingår i granskningen?

I underlaget ingår 0 studier.

Populationen i sökta studier var patienter där en tand med en ofullständig rotfyllning och utan tecken på periapikal parodontit ska förses med fast protetik med ett intraradikulärt stift. I interventionsgruppen skulle revision av rotfyllning ha utförts före protetisk behandling medan kontrollgruppen skulle få protetisk behandling utan revision. De sökta utfallsmåtten var apikala förhållanden efter minst 6 månader och tandöverlevnad efter 5 år.

Under granskning av litteraturen identifierades 3 tvärsnittsstudier som med röntgenbilder undersöker sambandet mellan periapikalstatus och rotfyllningens kvalitet hos tänder med ett intraradikulärt stift [1-3]. De tre studierna redovisar en högre andel periapikal parodontit på tänder med intraradikulära stift och dålig kvalitet på rotfyllningen jämfört med tänder med intraradikulära stift där rotfyllningen är av god kvalitet. I en retrospektiv tvärsnittsstudie är det emellertid inte möjligt att avgöra om en periapikal parodontit utvecklats före eller efter att det

intraradikulära stiftet placerats. I studierna redovisas heller inte hur lång tid som gått sedan rotfyllningar och stift gjordes. Eftersom studietypen inte är lämplig för orsakssamband så ingår de inte i det aktuella underlaget.

Inga pågående studier har identifierats.

Ja.

Saknas någon information i studierna?

Ingen relevant information saknas i studierna utifrån de uppställda inklusionskriterierna.

Ja. Det saknas studier.

Översikt av granskade studier

Val av litteratur

Resultat från litteratursökning Datum: 2019-10-10

Beskrivning	Antal
Studier som granskades på abstractnivå utifrån de uppställda kriterierna för PICO	1 369
Granskade abstract/s som bedömdes relevanta utifrån de uppställda kriterierna för PICO och granskades på fulltextnivå	10
Systematiska översikter/RCT-studier/observationsstudier som uppfyllde kriterierna för PICO och ingår i underlaget	0

Referenser

1. Tronstad L, Asbjornsen K, Doving L, Pedersen I, Eriksen HM. Influence of coronal restorations on the periapical health of endodontically treated teeth. *Endod Dent Traumatol* 2000;16:218-21.
2. Kvist T, Rydin E, Reit C. The relative frequency of periapical lesions in teeth with root canal-retained posts. *J Endod* 1989;15:578-80.
3. Farah RI, Aldakhili AS, Alnasser AS. A Radiographic Study of the Association between Apical Periodontitis and Technical Quality of Intraradicular Posts and Root Canal Fillings: A Cross-sectional Study in Qassim Region, Saudi Arabia. *Contemp Clin Dent* 2017;8:579-586.

Litteratursökning

Pubmed via NLM 30 September 2019

Search terms	Items found
Population/Problem	
1. "Root Canal Therapy"[Mesh] OR filled root canal*[tiab] OR root-canal-filled[tiab] OR root canal filling*[tiab] OR root canal obturation[tiab] OR root canal therap*[tiab] OR root canal treatment[tiab] OR root-filled[tiab] OR root filling*[tiab] OR endo retreatment[tiab] OR endodontic failure[tiab] OR endodontic retreatment[tiab] OR endodontic treatment[tiab] OR endodontically retreated[tiab] OR endodontically treated[tiab] OR obturated root canal*[tiab] OR root canal-retreated teeth[tiab] OR root canal retreatment[tiab] OR root canal treated[tiab] OR "Tooth, Nonvital"[Mesh] OR nonvital tooth[tiab] OR devitalized tooth[tiab] OR devitalized teeth[tiab] OR endodontically-treated teeth[tiab] OR endodontically-treated tooth[tiab] OR nonvital teeth[tiab] OR pulpless tooth[tiab] OR pulpless teeth[tiab] OR "Dental Leakage"[Mesh] OR leakage[tiab] OR microleakage[tiab] OR nanoleakage[tiab]	87873
Intervention:	
2. "Post and Core Technique"[Mesh] OR carbon fibre post*[tiab] OR cast post*[tiab] OR ceramic post*[tiab] OR dowel*[tiab] OR endodontic post*[tiab] OR fiber post*[tiab] OR fiberglass post*[tiab] OR fibre post*[tiab] OR fiber-reinforced core[tiab] OR metal-cast post*[tiab] OR metal post*[tiab] OR metallic post*[tiab] OR non-metal post*[tiab] OR post[ti] OR posts[ti] OR post and core[tiab] OR post-retained[tiab] OR root canal post*[tiab] OR root posts[tiab] OR titanium post*[tiab] OR zirconia post*[tiab]	125314
Study types: randomised controlled trials and other trials (filter: PubMed clinical queries, therapy, broad)¹	
3. ((clinical[Title/Abstract] AND trial[Title/Abstract]) OR clinical trials as topic[MeSH Terms] OR clinical trial[Publication Type] OR random*[Title/Abstract] OR random allocation[MeSH Terms] OR therapeutic use[MeSH Subheading])	5314375
Study types: systematic reviews and meta analysis (filter: Systematic Reviews Subset on PubMed 2017 to 2018² with modifications³)	
4. (((systematic review [ti] OR meta-analysis [pt] OR meta-analysis [ti] OR systematic literature review [ti] OR this systematic review [tw] OR pooling project [tw] OR (systematic review [tiab] AND review [pt]) OR meta synthesis [ti] OR meta-analy*[ti] OR integrative review [tw] OR integrative research review [tw] OR rapid review [tw] OR umbrella review [tw] OR consensus development conference [pt] OR practice guideline [pt] OR drug class reviews [ti] OR cochrane database syst rev [ta] OR acp journal club [ta] OR health technol assess [ta] OR evid rep technol assess summ [ta] OR jbi database system rev implement rep [ta]) OR (clinical guideline [tw] AND management [tw]) OR ((evidence based[ti] OR evidence-based medicine [mh] OR best practice* [ti] OR evidence synthesis [tiab]) AND (review [pt] OR diseases category[mh] OR behavior and behavior mechanisms [mh] OR therapeutics [mh] OR evaluation studies[pt] OR validation studies[pt] OR guideline [pt] OR pmcbook))OR ((systematic [tw] OR systematically [tw] OR critical [tiab] OR (study selection [tw] OR predetermined [tw] OR inclusion [tw] AND criteri* [tw]) OR exclusion criteri* [tw] OR main outcome measures [tw] OR standard of care [tw] OR standards of care [tw]) AND (survey [tiab] OR surveys [tiab] OR overview* [tw] OR review [tiab] OR reviews [tiab] OR search* [tw] OR handsearch [tw] OR analysis [ti] OR critique [tiab] OR appraisal [tw] OR (reduction [tw] AND (risk [mh] OR risk [tw]) AND (death OR recurrence))) AND (literature [tiab] OR articles [tiab] OR publications [tiab] OR publication [tiab] OR bibliography [tiab] OR bibliographies [tiab] OR published [tiab] OR pooled data [tw] OR unpublished [tw] OR citation [tw] OR citations [tw] OR database [tiab] OR internet [tiab] OR textbooks [tiab] OR references [tw] OR scales [tw] OR papers [tw] OR datasets [tw] OR trials [tiab] OR meta-analy* [tw] OR (clinical [tiab] AND studies [tiab]) OR treatment outcome [mh] OR treatment outcome [tw] OR pmcbook)) NOT (letter [pt] OR newspaper article [pt]))) OR "Systematic Review" [Publication Type]	423399
Combined sets/Limits	
5. 1 AND 2 AND 3 Filters activated: Danish, English, Norwegian, Swedish	1102
6. 1 AND 2 AND 4 Filters activated: Danish, English, Norwegian, Swedish	65

¹ Haynes RB, McKibbon KA, Wilczynski NL, Walter SD, Werre SR, Hedges Team. Optimal search strategies for retrieving scientifically strong studies of treatment from Medline: analytical survey. *BMJ* 2005;330(7501):1179.

² <https://sites.google.com/a/york.ac.uk/issg-search-filters-resource/filters-to-identify-systematic-reviews/-pubmed-search-strategy> (190522).

³ MeSH-term "Systematic Review" [Publication Type] added.

The search result, usually found at the end of the documentation, forms the list of abstracts.

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy

[MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy

[MAJR] = MeSH Major Topic

[TIAB] = Title or abstract

[TI] = Title
[AU] = Author
[OT]= Other term
[TW] = Text Word
Systematic[SB] = Filter for retrieving systematic reviews
* = Truncation

Embase via Elsevier 10 October 2019

Search terms	Items found
Population:	
1. 'endodontic procedure'/exp OR 'tooth pulp disease'/exp	11529
2. 'filled root canal*':ti,ab,kw OR 'root-canal-filled':ti,ab,kw OR 'root canal filling*':ti,ab,kw OR 'root canal obturation':ti,ab,kw OR 'root canal therap*':ti,ab,kw OR 'root canal treatment':ti,ab,kw OR 'root-filled':ti,ab,kw OR 'root filling*':ti,ab,kw OR 'endo retreatment':ti,ab,kw OR 'endodontic failure':ti,ab,kw OR 'endodontic retreatment':ti,ab,kw OR 'endodontic treatment':ti,ab,kw OR 'endodontically retreated':ti,ab,kw OR 'endodontically treated':ti,ab,kw OR 'obturated root canal*':ti,ab,kw OR 'root canal-retreated teeth':ti,ab,kw OR 'root canal retreatment':ti,ab,kw OR 'root canal treated':ti,ab,kw OR 'nonvital tooth':ti,ab,kw OR 'devitalized tooth':ti,ab,kw OR 'devitalized teeth':ti,ab,kw OR 'endodontically-treated teeth':ti,ab,kw OR 'nonvital teeth':ti,ab,kw OR 'pulpless tooth':ti,ab,kw OR 'pulpless teeth':ti,ab,kw OR 'leakage':ti,ab,kw OR 'microleakage':ti,ab,kw OR 'nanoleakage':ti,ab,kw	92164
3. 1 OR 2	100114
Intervention:	
4. 'carbon fibre post*':ti,ab,kw OR 'cast post*':ti,ab,kw OR 'ceramic post*':ti,ab,kw OR 'dowel*':ti,ab,kw OR 'endodontic post*':ti,ab,kw OR 'fiber post*':ti,ab,kw OR 'fiberglass post*':ti,ab,kw OR 'fibre post*':ti,ab,kw OR 'fiber-reinforced core':ti,ab,kw OR 'metal-cast post*':ti,ab,kw OR 'metal post*':ti,ab,kw OR 'metallic post*':ti,ab,kw OR 'non-metal post*':ti,ab,kw OR 'post and core':ti,ab,kw OR 'post-retained':ti,ab,kw OR 'root canal post*':ti,ab,kw OR 'root post*':ti,ab,kw OR 'titanium post*':ti,ab,kw OR 'zirconia post*':ti,ab,kw OR posts:ti	4636
Combined sets	
5. 3 AND 4	1433
6. 3 AND 4 AND ([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim) AND [embase]/lim	134

The search result, usually found at the end of the documentation, forms the list of abstracts.

/de= Term from the Emtree controlled vocabulary

/exp= Includes terms found below this term in the Emtree hierarchy

/mj = Major Topic

:ab = Abstract

:au = Author

:ti = Article Title

:ti:ab = Title or abstract

* = Truncation

“ ” = Citation Marks; searches for an exact phrase

Cochrane Library via Wiley 10 October 2019 (CDSR, CENTRAL)

Search terms		Items found
Population/Problem:		
1.	[mh "Root Canal Therapy"] OR [mh "Tooth, Nonvital"] OR [mh "Dental Leakage"]	1534
2.	("filled root canal*" OR "root-canal-filled" OR "root canal filling*" OR "root canal obturation" OR "root canal therap*" OR "root canal treatment" OR "root-filled" OR "root filling*" OR "endo retreatment" OR "endodontic failure" OR "endodontic retreatment" OR "endodontic treatment" OR "endodontically retreated" OR "endodontically treated" OR "obturated root canal*" OR "root canal-retreated teeth" OR "root canal retreatment" OR "root canal treated" OR "nonvital tooth" OR "devitalized tooth" OR "devitalized teeth" OR "nonvital teeth" OR "pulpless tooth" OR "pulpless teeth" OR leakage OR microleakage OR nanoleakage):ti,ab,kw	6613
3.	1 OR 2	7029
Intervention:		
4.	["Post and Core Technique"]	246
5.	("carbon fibre post*" OR "cast post*" OR "ceramic post*" OR dowel* OR "endodontic post*" OR "fiber post*" OR "fiberglass post*" OR "fibre post*" OR "fiber-reinforced core" OR "metal-cast post*" OR "metal post*" OR "metallic post*" OR "non-metal post*" OR "post and core" OR "post-retained" OR "root canal post*" OR "root posts" OR "titanium post*" OR "zirconia post*"):ti,ab,kw	370
6.	(post or posts):ti	21849
7.	4-6 (OR)	21977
Combined sets		
8.	3 AND 7	CDSR/5 Central/4 05

The search result, usually found at the end of the documentation, forms the list of abstracts.

:au = Author

MeSH = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy

this term only = Does not include terms found below this term in the MeSH hierarchy

:ti = title

:ab = abstract

:kw = keyword

* = Truncation

“ ” = Citation Marks; searches for an exact phrase

CDSR = Cochrane Database of Systematic Review

CENTRAL = Cochrane Central Register of Controlled Trials, “trials”

CRM = Method Studies

DARE = Database Abstracts of Reviews of Effects, “other reviews”

EED = Economic Evaluations

HTA = Health Technology Assessments