

Supplemental Material

Table S1 – Inclusion/Exclusion Criteria

Inclusion criteria:

- Population:
 - Adults presenting with acute dental pain and/or infection
 - Any healthcare setting or service (not limited to dentistry)
- Intervention
 - Any care provided for the relief of acute dental pain or treatment of acute dental infection, including operative and pharmacological treatment and other non-pharmacological approaches (including advice only or referral to other services).
- Outcome
 - All outcomes measured and reported by the study which are related to the relief of acute dental pain or treatment of acute dental infection.
- Study/publication type
 - Primary research reported in peer reviewed journals
 - English language only

Exclusion criteria:

- Population
 - Animal studies
 - In-vitro / lab-based studies
 - People under the age of 18 years
 - People with other oral or dental conditions (eg emergency dental conditions such as cervico-facial infections requiring hospitalisation, dental trauma or haemorrhage following an extraction; oral cancer; or chronic conditions such as chronic facial pain, TMD or trigeminal neuralgia)
 - People attending for routine preventative care
 - People attending for postoperative pain following routine/scheduled dental care eg removal of third molars
 - People with unusual medical conditions eg glucose-6-dehydrogenase deficiency
 - Papers which include both adults and children
 - Papers which include non-acute as well as acute conditions
 - Paper which included non-dental as well as dental conditions
- Intervention
 - Approaches outside of conventional guidelines eg holistic or complementary therapies including acupuncture
- Outcomes
 - Outcomes which are not related to the relief of acute dental pain or treatment of acute dental infection.
 - Outcomes relating to local anaesthesia to enable treatment
- Study/publication type:
 - Systematic review
 - Guidelines and guideline development
 - Trial Protocol
 - Opinion piece/Commentary/Review articles/Case Reports/Letters
 - Qualitative studies
 - Studies if updates had subsequently been published
 - Manuscript not in English (e.g. abstract in English but not the rest)
 - No abstract available – or only an abstract available

Table S2 – Search terms for each database

Database	Population search terms	Boolean Operator	Intervention search terms	Limitations employed
CINAHL Plus (EBSCO Host)	((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or Implantitis or Ulcer* or Stomatitis))	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*)	English Language Academic Journals
Dentistry and Oral Science Sources (EBSCO Host)	((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or Implantitis or Ulcer* or Stomatitis))	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*)	English Language Academic Journals
EMBASE (Ovid Online)	((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or	English Language Human

	Implantitis or Ulcer* or Stomatitis)).mp		Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*).mp	
Medline (Ovid Online)	((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or Implantitis or Ulcer* or Stomatitis)).mp	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*).mp	English Language Human
PsychINFO (Ovid Online)	((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or Implantitis or Ulcer* or Stomatitis)).mp	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*).mp	English Language Human
Scopus	Search within article title, abstract, key words: '((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*)	Published Articles English Language Human

	Implantitis or Ulcer* or Stomatitis))'			
Web of Science	((Acute* or Urgent or Unschedul* or Emergenc*) AND (Dent* or Odontogenic or Dentoalveolar) AND (Pain or Toothache or Pulpitis or Infection or Swell* or Abscess or Pericoronitis or Osteitis or Socket or Periodontitis or Implantitis or Ulcer* or Stomatitis))	AND	(Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer* or Patient Care or Dental Care or Procedure or Treat* or Endodont* or Exodont* or Extract* or Extirpat* or Incis* or Drain* or Debrid* or Irrigat* or Prescri* or Antibiotic* or Antimicrob* or Antiseptic or Analgesi* or Advice or Refer*)	Articles English Language

Table S3 – Quality assessment of the studies using Critical Appraisal Skills Programme (CASP) Checklist for Randomised Controlled Trials

	a) Is the basic study design valid for an RCT?			b) Was the study methodologically sound?				c) What are the results?		d) Will the results help?		Overall Include?	
	1. Clear research question?	2. Randomisation?	3. All participants accounted for?	4a. Participants blinded?	4b. Investigators blinded?	4c. Analysts blinded?	5. Study groups similar at the start?	6. Same treatment for each group?	7. Comprehensive reporting?	8. Benefits vs harms/costs?	9. Locally applicable?		10. Better than existing care?
Fazakerley et al, 1993	Yes	Yes	Yes	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes
Fouad et al, 1996	Yes	Yes	Yes	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Yes	Can't tell	Yes
Houck et al, 2000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nagle et al, 2000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pavithra et al, 2015	Yes	Yes	Yes	Yes	Yes	No	Can't tell	Yes	No	Yes	Yes	Yes	Yes
Santini et al, 2017	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Can't tell	Can't tell	No	Can't tell	Yes
Beus et al, 2018	Yes	Yes	Yes	Yes	No	Can't tell	Yes	Yes	No	Yes	Yes	Can't tell	Yes
Eren et al, 2018	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wolf et al, 2019	Yes	Yes	Yes	Can't tell	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Al-Rawhani et al, 2020	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Yes
da Silva et al, 2020	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table S3 – Quality assessment of studies which were not randomised controlled trials, using the Quality Assessment Tool for Studies with Diverse Designs (QATSDD)

	Explicit theoretical framework	Aims in main report	Setting described	Sample size considered	Sample of reasonable size	Data collection method	Choice of data collection tool(s)	Detailed recruitment data	Measuring tool assessed	Question and method fit - data collection	Question and method fit - analysis	Analysis method selected	Users involved in design	Strength/ limitation discussion	Total (% of maximum)
Scoring: 0 = No mention; 1=very slightly covered; 2=Moderately covered; 3=Completely covered. Where independent reviewer scores differed, averages are provided.															
Gibson et al, 1993	0	2	2	0	3	2	1	2	0	3	2	1	1	2	21 (53%)
Nusstein et al, 2002	1	3	2	0	0	3	2	3	1	2	3	1	0	1	22 (55%)
Campanelli et al, 2008	0	2	3	0	1	3	0	3	1	3	3	1	0	1	21 (53%)
Cohen et al, 2009	3	3	3	1	2	3	3	3	1	3	3	3	3	2	36 (90%)
Wilson et al, 2013	0	1	3	0	1	1	3	2	1	2	2	1	3	3	23 (58%)
Aaron et al, 2018	0	3	3	3	3	3	1	0	0	3	2	1	0	2	24 (60%)
Penniston et al, 1996	0	2	3	3	1	2	0	2.5	0	3	3	1	0	0	20.5 (51%)
Adriaenssen et al, 1998	2	1	3	3	3	2	1	2	0	1	2	0	0	0	20 (50%)
Doroschak et al, 1999	3	3	3	2	1	3	3	2.5	2	3	3	1	0	2	31.5 (79%)
Gallatin et al, 2000	3	3	1	0	1	3	1	3	0	3	2	1	0	1	22 (55%)
Henry et al, 2001	3	3	1	0	1.5	2.5	0	3	0	3	2	1	0	2	22 (55%)
Hersh et al, 2003	3	3	3	0	3	2	3	3	0	3	3	2	0	2	30 (75%)
Runyon et al, 2004	3	3	2	3	3	3	1	3	0	3	3	2	0	3	32 (80%)
Sethi et al, 2014	1	3	1	2	3	3	3	3	0	3	3	2	0	1	28 (70%)
Bultema et al, 2016	3	3	1	0	3	2	2	3	0	3	3	1	0	2	26 (65%)
Sebastian et al, 2016	2	3	1	0	3	2	1	3	0	2	2	1	0	1	21 (53%)
Taggar et al, 2017	3	3	1	1	3	3	1	3	0	2	2	1	0	3	26 (65%)