

Surgical site infection

prevention and treatment of
surgical site infection

Clinical Guideline

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surgical site infection

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4.1 Information for patients and carers

Study	Reason for exclusion
Anonymous (2005) ¹	Opinion article
Anonymous (2005) ²	BL unable to supply
Anonymous (2006) ³	BL unable to supply
Anonymous (2006) ⁴	Not SSI as outcome
Anonymous (2006) ^b	Narrative review
Anonymous (2007) ^b	Editorial
Creedon SA. (2006) ⁷	Health care workers infection control practices explored
Duncan C. (2007) ⁸	Not SSI as outcome
Gilmartin J, Wright K. (2007) ⁹	Patient information not considered
Gould D. (2007) ¹⁰	Narrative review
Lord C. (2006) ¹¹	Narrative review
Luszczynska A, Gunson KS. (2007) ¹²	Not SSI as outcome
McBride T, Beamer J. (2007) ¹³	Patient information not considered
Merle V et al. (2005) ¹⁴	Nosocomial infections (not specific for SSI)
Moller T et al. (2005) ¹⁵	CVC infections, out of scope
Pieper B et al. Nursing (2007) ¹⁶	Not SSI as outcome
Theofanidis D. (2006) ¹⁷	Narrative review

5.1 Preoperative showering

Study	Reason for exclusion
Stewart (2006) ¹⁸	No relevant RCTs included in SR
Stewart (2007) ¹⁹	Secondary publication of Stewart (2006)
Webster (2006) ²⁰	Not the principal publication

5.2 Hair removal

Study	Reason for exclusion
Dohman (2006) ²¹	Narrative review
Niel-Wise (2005) ²²	Outdated systematic review used to identify relevant trials
Tanner (2007) ²³	Not the principal publication
Taylor (2005) ²⁴	No SSI outcome
Howell (1988) ²⁵	No relevant comparison (timing of hair removal)
Kjonnixsen (2002) ²⁶	Systematic review used to identify relevant trials
Mehta (1988) ²⁷	No relevant comparison (timing of hair removal)
Mishriki (1990) ²⁸	No relevant comparison (timing of hair removal)
Razavi (2005) ²⁹	No relevant comparison (timing of hair removal)
Rojanapirom (1992) ³⁰	No relevant comparison (timing of hair removal)
Sellick (1991) ³¹	No relevant comparison (timing of hair removal)
Thur de Koos (1983) ³²	No relevant comparison (timing of hair removal)

5.3 Patient theatre wear

Study	Reason for exclusion
Anonymous (1998) ³³	Guidance paper

5.4 Staff theatre wear

Study	Reason for exclusion
Lipp (2005) ⁴⁵¹	Not in English (French)
Blomgren (1983) ³⁴	Not an RCT
McCluskey (1996) ³⁵	Narrative review
Weightman (1994) ³⁶	Narrative review

5.6 Nasal decontamination

Study	Reason for exclusion
Diehr (2007) ³⁷	Narrative review
Dupeyron (2006) ³⁸	Not an RCT
Gernaat-van der Sluis (1998) ³⁹	Not an RCT
Haas (2005) ⁴⁰	Not an RCT
Herwaldt (2004) ⁴¹	Not an RCT
Kallen (2002) ⁴²	Outdated systematic review used to identify relevant trials
Kluytmans (2004) ⁴³	Narrative review
Perl (1998) ⁴⁴	Narrative review
Perl (2003) ⁴⁵	Narrative review
Samad (2002) ⁴⁶	Not an RCT
San Juan (2007) ⁴⁷	Not an RCT
Czarnecki (1992) ⁴⁸	Topical not nasal administration
Horiuchi (2006) ⁴⁹	Intervention excluded in scope
Vidhani (2002) ⁵⁰	Not an RCT
Wertheim (2005) ⁵¹	Narrative review

5.7 Mechanical bowel preparation

Study	Reason for exclusion
Bucher (2004) ⁵²	Outdated systematic review
Chattopadhyay (2004) ⁵³	Comparison not relevant
Fa-Si-Oen (2005) ⁵⁴	Not fullest report
Gray (2005) ⁵⁵	Outdated systematic review
Itani (2007) ⁵⁶	Post hoc analysis
Leys (2005) ⁵⁷	Not an RCT
Muller-Stich (2006) ⁵⁵	Outdated systematic review
Platell (2006) ⁵⁸	Comparison not relevant
Ram (2005) ⁵⁹	Quasi-RCT
Rovera (2006) ⁶⁰	Narrative review
Sanders (2007) ⁶¹	Comparison not relevant
Slim (2004) ⁶²	Outdated systematic review

Study	Reason for exclusion
Guenaga (2007) ⁶³	Outdated systematic review
Platell (2005) ⁶⁴	Conference abstract
Sinha (2007) ⁶⁵	No SSI outcome
Zmora (2006) ⁶⁶	Sub group analysis

5.9 Hand jewellery, artificial nails and nail polish

and

6.1 Hand decontamination

Study	Reason for exclusion
Aksoy A. et al (2005) ⁶⁷	Not an RCT
Carro C et al (2007) ⁶⁸	Not SSI outcome
Castella A et al (2006) ⁶⁹	Not an RCT
Constant H et al (2006) ⁷⁰	Not an RCT
Gardlund B (2007) ⁷¹	Not an RCT
Gupta C et al (2007) ⁷²	Not SSI outcome
Howard JL and Hanssen AD (2007) ⁷³	Not an RCT
Humes D (2006) ⁷⁴	Not an RCT
Palmer JS (2006) ⁷⁵	Not an RCT
Preston RM (2005) ⁷⁶	Not an RCT
Watermen TR et al (2006) ⁷⁷	Not patients having operations. Not SSI outcome

5.10 Antibiotic prophylaxis

Study	Reason for exclusion
Ali (1997) ⁷⁸	Comparison irrelevant
Anonymous (2006) ⁷⁹	Not a systematic review
Aufenacker (2006) ⁸⁰	Outdated systematic review
Chelmow (2001) ⁸¹	Outdated systematic review
Chromik (2006) ⁸²	No SSI outcome
Cummings (1995) ⁸³	Population excluded
Esposito (2006) ⁸⁴	No SSI outcome
Garey (2006) ⁸⁵	Not an RCT
Hauser (2006) ⁸⁶	Alternative systematic review used
Iribarren (2006) ⁸⁷	Setting irrelevant
McDonald (1998) ⁸⁸	Comparison irrelevant
Mohri (2007) ⁸⁹	Comparison irrelevant
Osuiqwe (2006) ⁹⁰	Not relevant to UK
Sanabria (2007) ⁹¹	Outdated systematic review
Tejjirian (2006) ⁹²	Alternative systematic review used
Verschuur (2007) ⁹³	Insufficient detail available
Stewart (2007) ⁹⁴	Not primary publication
Togo (2007) ⁹⁵	Comparison irrelevant
Vieira (2006) ⁹⁶	
Villalobos (1998) ⁹⁷	No SSI outcome
Johnson (2006) ⁹⁸	No SSI outcome
Amland (1995) ⁹⁹	Insufficient detail available
Ceccarini (2005) ¹⁰⁰	Not in English (Italian)

Study	Reason for exclusion
Cocks (1981) ¹⁰¹	Insufficient detail available
Cunha (1986) ¹⁰²	Not in English (Spanish)
Davey (1995) ¹⁰³	No SSI outcome
Dhar (1993) ¹⁰⁴	No SSI outcome
Evans (1984) ¹⁰⁵	No SSI outcome
Fujita (2007) ¹⁰⁶	Comparison irrelevant
Giercksky (1980) ¹⁰⁷	No SSI outcome
Ishida (2001) ¹⁰⁸	Intervention not relevant
Jewell (1988) ¹⁰⁹	Comparison irrelevant
Keogh (1995) ¹¹⁰	No SSI outcome
Khan (1978) ¹¹¹	Comparison irrelevant
Lindeboom (2005) ¹¹²	No skin incision
McArdle (1994) ¹¹³	Comparison irrelevant
Morimoto (1998) ¹¹⁴	Comparison irrelevant
Nielsen (1993) ¹¹⁵	No SSI outcome
Perl (2003) ¹¹⁶	Outcome too specific
Popkin (1983) ¹¹⁷	Insufficient detail available
Shapiro (1991) ¹¹⁸	Insufficient detail available
Shapiro (1986) ¹¹⁹	Narrative review
Sondenaa (1995) ¹²⁰	Population excluded
Song (1998) ¹²¹	Comparison irrelevant
Sweeney (1984) ¹²²	Sample size too small
Takesue (2000) ¹²³	Not an RCT
Taylor (1994) ¹²⁴	Comparison irrelevant
Vallance (1980) ¹²⁵	Comparison irrelevant
Whittaker (2005) ¹²⁶	Population excluded
Willis (1976) ¹²⁷	No relevant outcome
Wu (1998) ¹²⁸	Comparison irrelevant
Righi (1995) ¹²⁹	Comparison irrelevant
Ahmadi (2005) ¹³⁰	Not an RCT
Andrews (2006) ¹³¹	No SSI outcome
Avery (2006) ¹³²	Not an RCT
Baqain (2004) ¹³³	Population excluded
Baum (1981) ¹³⁴	No relevant outcome
Bentley (1999) ¹³⁵	Population excluded
Berghella (2005) ¹³⁶	Guidance paper
Bricard (1994) ¹³⁷	Not in English (French)
Coskun (2000) ¹³⁹	Not an RCT
Dellinger (1994) ¹⁴⁰	Guidance paper
Donovan (1979) ¹⁴¹	No relevant outcome
Engesaeter (2003) ¹⁴²	Not an RCT
Fridrich (1994) ¹⁴³	Population excluded
Harbarth (2000) ¹⁴⁴	Not an RCT
Johnson (1987) ¹⁴⁵	Not an RCT
Meir (2004) ¹⁴⁶	Not an RCT
Mittendorf (1993) ¹⁴⁷	Outdated systematic review
Mui (2005) ¹⁴⁸	Comparison irrelevant
Narang (2003) ¹⁴⁹	No skin incision
Seal (2006) ¹⁵⁰	No skin incision
Seven (2004) ¹⁵¹	Not an RCT
Shohet (1983) ¹⁵²	Not an RCT

Study	Reason for exclusion
Takeyama (2005) ¹⁵³	Not an RCT
Vardy (2000) ¹⁵⁴	Not an RCT
Winslow (1983) ¹⁵⁵	Not an RCT
Zanetti (2001) ¹⁵⁶	Not an RCT
Zijderveld (1999) ¹⁵⁷	Population excluded

6.2 Incise drapes

and

6.3 Use of sterile gowns

and

6.4 Disposable or reusable drapes and gowns

and

6.5 Gloves

Study	Reason for exclusion
Belkin NL et al (2006) ¹⁵⁸	Not an RCT
Goucher et al (2007) ¹⁵⁹	Does not assessed the variables of interest
Dineen P (1973) ¹⁶⁰	Not an RCT. Not SSI as outcome
Lewis DA et el (1984) ¹⁶¹	Not SSI as outcome
Moylan JA et al (1987) ¹⁶²	Not an RCT
Ozer MT et al (2006) ¹⁶³	Not applicable to the UK
Rutala WA (2001) ¹⁶⁴	A review
Parsons S et al (2002) ¹⁶⁵	Not an RCT
Scott EM. (2007) ¹⁶⁶	Not an RCT
Segers P et al. (2007) ¹⁶⁷	Does not assessed the variables of interest

6.6 Antiseptic skin preparation

Study	Reason for exclusion
Alper (2006) ¹⁶⁸	Narrative review
Brooks (2001) ¹⁶⁹	Insufficient SSI definition
Edwards (2004) ¹⁷⁰	Outdated systematic review used to identify relevant trials
Lipp (2005) ¹⁷¹	Secondary publication
May (1993) ¹⁷²	Irrelevant intervention
Meier (2001) ¹⁷³	Not relevant to UK
Newsom (1988) ¹⁷⁴	Not pre-operative skin antisepsis
Ritter (1980) ¹⁷⁵	Not SSI outcome
Shirahatti (1993) ¹⁷⁶	Insufficient SSI definition
Fletcher (2007) ¹⁷⁷	Narrative review
Zdeblick (1986) ¹⁷⁸	Insufficient SSI definition
Kovacikova (2002) ¹⁷⁹	Not an RCT
Ryan (1987) ¹⁸⁰	Not an RCT
Wakhlu (2000) ¹⁸¹	Not an RCT

6.7 Diathermy

Study	Reason for exclusion
Chrysos (2005) ¹⁸²	Quasi-RCT
Franchi (2001) ¹⁸³	not RCT
Kumar (2002) ¹⁸⁴	narrative review
Orejola (2000) ¹⁸⁵	not RCT
Senagore (1993) ¹⁸⁶	no SSI outcome
Sheikh (2004) ¹⁸⁷	not an RCT
Singer (2001) ¹⁸⁸	not a trial of incision type
Stolz (2004) ¹⁸⁹	not in English (Czech).

6.8 Maintaining patient homeostasis – perioperative oxygenation

Study	Reason for exclusion
Mygrant BI (1998) ¹⁹⁰	Copy for lecture not available. Not an RCT
Goldfaden A (2005) ¹⁹¹	Not an RCT
Chura JC (2007) ¹⁹²	Review of the impact of supplemental perioperative oxygen on the incidence of surgical site infections in colorectal surgical patients. This review was well done but the four RCTs included were already identified.
Lee JT (2000) ¹⁹³	Not an RCT
Kabon B (2006) ¹⁹⁴	Not an RCT
Chapman S (2001) ¹⁹⁵	Not an RCT
Denault A (2001) ¹⁹⁶	Not an RCT
Garcia-Botello SA (2006) ¹⁹⁷	Not an SSI outcome
Sessler DI (2006) ¹⁹⁸	Not an RCT

6.8 Maintaining patient homeostasis – blood glucose control

Study	Reason for exclusion
Carr JM et al (2005) ¹⁹⁹	Not an RCT
Collier B et al (2005) ²⁰⁰	A not randomised control trial
Dellinger EP (2001) ²⁰¹	Not an RCT
Doll M et al (2006) ²⁰²	Not an RCT
Fletcher N et al (2007) ¹⁷⁷	Tight glucose control not considered
Fynn-Thompson F et al (2004) ²⁰³	Not an RCT
Gannon R et al (2007) ²⁰⁴	Not an RCT
Gandhi GY et al (2005) ²⁰⁵	Not an RCT
Gurkan I et al (2006) ²⁰⁶	Not an RCT
Haycock C et al (2005) ²⁰⁷	Not an RCT
Hermayer KL et al (2006) ²⁰⁸	Not an RCT
Hilleman DE et al (2006) ²⁰⁹	Not an RCT
kao LS et al (2007) ²¹⁰	Protocol
Lorenz RA et al (2005) ²¹¹	Review: none of the studies included in this review were found suitable (main reasons being: diabetic population, not RCT and/or not considering blood glucose control)
Lutarewych M et al (2004) ²¹²	Not an RCT
Mathias JM (2006) ²¹³	Not an RCT
Mauermann WJ et al (2006) ²¹⁴	Not an RCT
Meharabi M et al (2007) ²¹⁵	Not an RCT

Study	Reason for exclusion
Melling A et al (2005) ²¹⁶	Glycaemic control not considered
Odom-Forrem J et al (2006) ²¹⁷	Not an RCT
Patterson P et al (2004) ²¹⁸	Not an RCT
Presutti E et al (2006) ²¹⁹	Not an RCT
Rao N et al (2004) ²²⁰	Not an RCT
Schweon S (2006) ²²¹	Not an RCT
Sessler DI (2006) ²²²	Not an RCT
Stewart MW (2006) ²²³	'Haycock' study (already excluded) reported
Swenne CL (2005) ²²⁴	Not an RCT
Trick WE et al (2000) ²²⁵	Not an RCT
Vriesendorp TM et al (2004) ²²⁶	Not an RCT
(1985) ²²⁷	Not provided by BL
(2006) ²²⁸	Reports 'Dronge' study (which is not an RCT)
(2005) ²²⁹	Reports 'Carr' study (already excluded)
(2004) ²³⁰	Not provided by BL
(1996) ²³¹	Not an RCT

6.8 Maintaining patient homeostasis – perfusion

Study	Reason for exclusion
Arkilic C.F. <i>et al</i> (2003) ²³²	Not consider SSI as an outcome
Heiner S. <i>et al</i> (2002) ²³³	Too short follow-up SSI not reported

6.9 Wound irrigation and intracavity lavage

Study	Reason for exclusion
Al-Ramahi (2006) ²⁴⁷	Quasi RCT
Angelini (1990) ²⁴⁸	Not an RCT
Baker (1994) ²⁴⁹	Conference abstract
Bhargava (2006) ²⁵⁰	Quasi RCT
Bhushan (1975) ²⁵¹	Not an RCT
Ducharme (1986) ²⁵²	Not in English (French)
Elliot (1986) ²⁵³	Comparison not included
Grandis (1994) ²⁵⁴	Not an RCT
Gupta (2006) ²⁵⁵	Not an RCT
Guzman (1999) ²⁵⁶	Comparison not included
Kellum (1985) ²⁵⁷	Not an RCT
Kivilaakso (1984) ²⁵⁸	Not SSI outcome
Kumar (1989) ²⁵⁹	Not an RCT
Leiboff (1987) ²⁶⁰	Not a systematic review
Levin (1983) ²⁶¹	Uterine irrigation intervention
Mathelier (1992) ²⁶²	Quasi RCT
McAllister (1988) ²⁶³	Quasi RCT
Miyazawa (1987) ²⁶⁴	Not an RCT
Nomikos (1986) ²⁶⁵	Quasi RCT
Normann (1975) ²⁶⁶	Not an RCT

Study	Reason for exclusion
O'Boyle (2002) ²⁶⁷	Not SSI outcome
Parker (1985) ²⁶⁸	Bowel irrigation intervention
Pitt (1982) ²⁶⁹	Quasi RCT
Robles (1992) ²⁷⁰	Not an RCT
Saha (1985) ²⁷¹	Not an RCT
Scheuerlein (2000) ²⁷²	Not in English (German)
Shaw (1985) ²⁷³	Not SSI outcome
Tighe (1982) ²⁷⁴	Insufficient detail available
Uden (1983) ²⁷⁵	Not an RCT
Washington (1983) ²⁷⁶	Not an RCT
Wayand (1985) ²⁷⁷	Comparison not included
Wu (1991) ²⁷⁸	Insufficient SSI definition
Wu (1992) ²⁷⁸	Not in English (Chinese)

6.10 Antiseptic and antimicrobial agents before wound closure

Study	Reason for exclusion
Friberg O et al (2007) ²⁷⁹	skin A/B not examined
Kosowski K et al (1996) ²⁸⁰	Polish skin A/B not examined
Kothuis BJL (1981) ²⁸¹	I/O skin A/S not examined
Maswoswe JJ (1995) ²⁸²	I/O skin A/S and A/B not examined
Mortensen J et al (1995) ²⁸³	I/O skin A/B not examined
Sarr MG et al (1988) ²⁸⁴	I/O skin A/B not examined
Sindelar WF et al (1979) ²⁸⁵	I/O skin A/S not examined
Verschuur HP et al (2007) ⁹³	I/O skin A/B not examined
Pedrini et al (2003) ²⁸⁶	I/O skin A/B not examined

6.11 Closure methods

Study	Reason for exclusion
Affi (2005) ²⁸⁷	Intervention irrelevant
Al-Abdullah (2007) ²⁸⁸	Systematic review used to identify relevant trials
Anatol (1997) ²⁸⁹	Outmoded suture material used (catgut)
Angelini (1985) ²⁹⁰	Comparison irrelevant
Bamigboye (2007) ²⁹¹	Intervention irrelevant
Bittner (2005) ²⁹²	Comparison irrelevant
Bottio (2003) ²⁹³	Intervention irrelevant
Cahill (1989) ²⁹⁴	Outmoded suture material used (nylon for hernia)
Ceydeli (2005) ²⁹⁵	Insufficient detail provided
Cheng (1997) ²⁹⁶	Outmoded suture material used (catgut)
Chowdhury (1993) ²⁹⁷	Outmoded suture material used (catgut)
Corder (1991) ²⁹⁸	More than one variable changing during intervention
Coulthard (2007) ²⁹⁹	Outdated systematic review used to identify relevant trials
Efem (1988) ³⁰⁰	Outmoded suture material used (catgut)
Fagniez (1985) ³⁰¹	Baseline comparability not demonstrated
Farnell (1986) ³⁰²	Intervention irrelevant
Gainant (1989) ³⁰³	Comparison irrelevant
Hiramatsu (1998) ³⁰⁴	More than one variable changing during intervention

Study	Reason for exclusion
Hosseini (2006) ³⁰⁵	Comparison irrelevant
Hsiao (2000) ³⁰⁶	More than one variable changing during intervention
Karabay (2005) ³⁰⁷	More than one variable changing during intervention
Kazemier (2006) ³⁰⁸	Comparison irrelevant
Khammash (1994) ³⁰⁹	Intervention not used in UK (zipper closure)
Korenkov (2002) ³¹⁰	Comparison irrelevant
Kuo (2006) ³¹¹	Pilot study (n= 15)
Maffulli (1991) ³¹²	Outmoded suture material used (silk)
Mansha (2005) ³¹³	Not an RCT
McNeill (1986) ³¹⁴	Intervention irrelevant (stainless steel wires)
Morano (2006) ³¹⁵	Intervention irrelevant
Murtha (2006) ³¹⁶	Intervention irrelevant
Mylonas (1991) ³¹⁷	More than one variable changing during intervention
Negri (2002) ³¹⁸	Intervention irrelevant
Onuminya (2006) ³¹⁹	Intervention not used in UK (zipper closure)
Onwuanyi (1990) ³²⁰	Not relevant to UK
Ozkan (2005) ³²¹	Outmoded suture material used (catgut)
Rink (2000) ³²²	Intervention irrelevant (wire sutures)
Risnes (2001) ³²³	More than one variable changing during intervention
Risnes (2002) ³²⁴	More than one variable changing during intervention
Roolker (2002) ³²⁵	Intervention not used in UK (zipper closure)
Sanni (2007) ³²⁶	Systematic review used to identify relevant trials
Fleck (2007) ³²⁷	Not an RCT
Tamelis (2005) ³²⁸	Conference abstract
Wetter (1991) ³²⁹	Outmoded suture material used (catgut)
Zafar (2005) ³³⁰	Comparison irrelevant

6.12 Wound dressings

and

7.3 Topical antimicrobial agents for wound healing by primary intention

and

7.4 Dressings for wound healing by secondary intention

Study	Reason for exclusion
Ajao (1977) ³³¹	Not applicable UK context
Allie (2004) ³³²	Retrospective study
Andersson (1967) ³³³	Insufficient data available
Bail (1998) ³³⁴	Retrospective study
Berry (1996) ³³⁵	Pilonidal sinus disease
Brown (2004) ³³⁶	Prophylactic wound drain examined
Castelli (2001) ³³⁷	Pressure dressings
Chrintz (1989) ³³⁸	Foreign language (danish)
Coerper (2001) ³³⁹	Out of scope-diabetic foot ulcer
Cohn (2001) ³⁴⁰	Closure procedures examined
Dawson (1996) ³⁴¹	Not applicable uk context
Eldrup (1981) ³⁴²	Closure methods examined
Gardezi (1983) ³⁴³	Not applicable uk context
Garne (1989) ³⁴⁴	Foreign language (Danish)
Goldsbrough (1999) ³⁴⁵	Observational study

Study	Reason for exclusion
Guillotreau (1996) ³⁴⁶	Pilonidal sinus disease
Hausler (2002) ³⁴⁷	No SSI reported
Hermans (1993) ³⁴⁸	No comparative group- no SSI reported
Hulten (1994) ³⁴⁹	Narrative review
Karch (2001) ³⁵⁰	Dressing changing technique
Kirwan (1995) ³⁵¹	Case-report
Law (1987) ³⁵²	Insufficient data available
Leaper (1994) ³⁵³	Narrative review
Leaper (1995) ³⁵⁴	Narrative review
Mansha (2005) ³¹³	Not an RCT
Merei (2004) ³⁵⁵	Pressure dressings
Merei (2006) ³⁵⁶	Pressure dressings
Molan (2006) ³⁵⁷	Narrative review
Moore (2001) ³⁵⁸	Systematic review: superficial burns included
Moshakis (1984) ³⁵⁹	SSI not considered as an outcome
Murthy (2002) ³⁶⁰	SSI not considered as an outcome
Phuapradit (1992) ³⁶¹	Case-report
Ravenscroft (2006) ³⁶²	Insufficient data
Reinicke (1990) ³⁶³	Foreign language (German)
Rosenfeldt (2003) ³⁶⁴	Wrap dressings
Rowe-Jones (1993) ³⁶⁵	Pressure dressings
Rubio (1991) ³⁶⁶	Not an RCT
Schmidt (1996) ³⁶⁷	The taped group had stitches
Scott (1982) ³⁶⁸	Insufficient data available
Shealy (2006) ³⁶⁹	Case-report
Silvertone (1979) ³⁶⁹	Case-report
Sticha (1998) ³⁷⁰	No comparator
Swenne (2006) ³⁷¹	Not an RCT
Terrill (2000) ³⁷²	Insufficient information available
Tsai (2007) ³⁷²	Case-report
Vardi (1998) ³⁷³	Case-series
Vermahos (2002) ³⁷⁴	Closure techniques examined
Verrier (1979) ³⁷⁵	Closure techniques examined
Walker (1991) ³⁷⁶	Pilonidal sinus disease
Ward (2001) ³⁷⁷	Drapes examined
Weiss (1983) ³⁷⁸	Not an RCT
White (2001) ³⁷⁹	Narrative review
White (2006) ³⁸⁰	Narrative review
Zeitani (2004) ³⁸¹	Closure techniques examined
Al-Waili (1999) ³⁸²	Not applicable to the UK context
Schmidt (1991) ³⁸³	Very high risk of bias
Burrows (2000) ³⁸⁴	The studies included in this review were already identified by our search
Agren (2006) ³⁸⁵	Pilonidal sinus disease
Ahmed (2003) ³⁸⁶	Not an RCT
Andersen (1972) ³⁸⁷	Intra-operative antibiotics
Andersen (2005) ³⁸⁸	Systematic review: all the studies included intra-operative antibiotics/systemic antibiotics
Andersen (1980) ³⁸⁹	Intra-operative antibiotics
Bagger-Sjoback (1987) ³⁹⁰	Systemic antibiotics
Bayerl (2004) ³⁹¹	Foreign language (German)
Brockenbrough (1969) ³⁹²	Intra-operative antibiotics

Study	Reason for exclusion
Broder (2004) ³⁹³	Systemic antibiotics
Conte (1995) ³⁹⁴	Foreign language (Spanish)
Darouiche (2003) ³⁹⁵	Not an RCT
Dixon (2006) ³⁹⁶	Out of the scope (dermatological intervention)
Donaldson (1966) ³⁹⁷	Systemic antibiotics
Dow (1998) ³⁹⁸	Not an RCT
Eschelmann (1971) ³⁹⁹	Intra-operative antibiotics
Evans (1974) ⁴⁰⁰	Intra-operative antibiotics
File (1995) ⁴⁰¹	Narrative review
Goetze (2006) ⁴⁰²	Out of the scope (patients undergoing curettage)
Gornall (1999) ⁴⁰³	Out of the scope (no skin incision)
Govaerts (1998) ⁴⁰⁴	Systemic antibiotics
Hampson (2006) ⁴⁰⁵	Not an RCT
Hesselfeldt (1988) ⁴⁰⁶	Foreign language (Danish)
Iselin (1990) ⁴⁰⁷	Foreign language (French)
Jacob (1984) ⁴⁰⁸	Systemic antibiotics
Jurczak (2007) ⁴⁰⁹	Trauma patients included
Juul (1985) ⁴¹⁰	Intra-operative antibiotics
Kiff (1988) ⁴¹¹	Intra-operative antibiotics
Lawes (2005) ⁴¹²	Not an RCT
Lee (2004) ⁴¹³	Intra-operative antibiotics
Lemus (2005) ⁴¹⁴	Foreign language (Spanish)
Lildholdt (1986) ⁴¹⁵	Systemic antibiotics
Madsen (1971) ⁴¹⁶	Intra-operative antibiotics
Marculescu (2005) ⁴¹⁷	Not an RCT
Merrild (1985) ⁴¹⁸	Foreign language
Naessens (1983) ⁴¹⁹	Not an RCT
Song (1998) ⁴²⁰	Systematic review addressing systemic antibiotics/intra-operative antibiotics
Nichols (2005) ⁴²¹	Not an RCT
Pirodda (1994) ⁴²²	Foreign language (Italian)
Reith (1996) ⁴²³	Foreign language (German)
Riesinger (2006) ⁴²⁴	BL unable to provide
Rodrigo (2004) ⁴²⁵	Systemic antibiotics
Rosen (1991) ⁴²⁶	Intra-operative antibiotics
Schultz (1983) ⁴²⁷	Intra-operative antibiotics
Shinagawa (1987) ⁴²⁸	Intra-operative antibiotics
Simons (2001) ⁴²⁹	Out of the scope
Smack (1996) ⁴³⁰	Out of the scope (dermatological procedure)
Takahashi (2006) ⁴³¹	Ethical issues not addressed adequately
Taylor (1997) ⁴³²	Systemic antibiotics
Teppler (2002) ⁴³³	Intra-operative antibiotics
Vermeulen (2005) ⁴³⁴	Systematic review: the relevant trial already identified in our searches
Vogel (1992) ⁴³⁵	Foreign language (German)
Walwaikar (2002) ⁴³⁶	Too many variables assessed
Winerman (1981) ⁴³⁷	Systemic antibiotics

7.1 Changing dressings

Study	Reason for exclusion
Karch AM and Karch FE (2001) ³⁵⁰	Case-report
Lawson C et al. (2003) ⁴³⁸	Before-after design

7.2 Postoperative cleansing

Study	Reason for exclusion
Fernandez (2003) ⁴³⁹	Not primary publication
Fernandez (2004) ⁴⁴⁰	Outdated systematic review
Fernandez (2001) ⁴⁴¹	Not primary publication
Goldberg (1981) ⁴⁴²	Not an RCT
Kramer date ⁴⁴³	Not a systematic review
Laufman (1989) ⁴⁴⁴	Not an RCT
Ovington (2001) ⁴⁴⁵	Not an RCT
Vardi (1998) ⁴⁴⁶	Intervention irrelevant
Willcox (2004) ⁴⁴⁷	Population not relevant

7.6 Debridement

Study	Reason for exclusion
Aldemir M et al. (2003) ⁴⁴⁸	Pilonidal sinus disease
Gates JL et al. (1992) ⁴⁴⁹	Not randomized trial
Lewis R et al. (2001) ⁴⁵⁰	Systematic review used for the identification of relevant trials
Sondergaard J. O. and Galatius H. (1982) ⁷⁸	Not in english
Vermeulen H et al. (2007) ⁴³⁴	Not specific for debridement techniques. Systematic review used for the identification of relevant trials

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