CRD summary
This review concluded that fibrin glue for pilonidal disease showed early promise, and definitive research was needed. These conclusions reflect the evidence presented; limitations to the review methods and the evidence suggest that the first part of the conclusion may not be reliable. The recommendation for further research is warranted.

Authors' objectives
To evaluate healing times and recurrence rates with fibrin glue for pilonidal disease (a chronic skin infection in the buttock crease).

Searching
Science Direct and PubMed were searched (no dates reported). Search terms were reported. Reference lists of relevant articles were checked to locate further studies.

Study selection
To be included, studies had to report healing times and recurrence rates, with fibrin glue (in addition or replacement to usual therapy, as defined in the review) for symptomatic pilonidal disease. Eligible comparators were usual therapies delivered alone.

Just over half of the included studies were of a mix of patients with acute or chronic pilonidal disease; the others were of patients with acute pilonidal disease. Where reported, the ages of patients ranged from 17 to 50 years; most patients were male. Intervention techniques and the measures of healing time varied across the studies. Only one study reported having a control group; this study involved a Limberg procedure, with or without fibrin glue under the flap.

One reviewer selected the studies for inclusion.

Assessment of study quality
It seems that quality assessment was not performed.

Data extraction
The length of hospital stay, healing rates, complications, and recurrence rates were extracted by one reviewer.

Methods of synthesis
These data were presented in a narrative synthesis.

Results of the review
Five studies were included in the review, with 101 patients (range six to 32); four were pilot studies and one was a randomised controlled trial (RCT). Follow-up ranged from four to 23 months.

Overall healing times were all less than six weeks in three pilot studies. Another pilot study reported a mean of 11 days until patients returned to work.

Four studies (including the RCT) reported recurrence rates of zero with fibrin glue. The other pilot study, which used curettage and fibrin fill as the intervention technique, reported that one of their six patients (17%) experienced recurrence of the disease.

Further details of the individual studies were reported.

Authors' conclusions
The use of fibrin glue for pilonidal disease showed early promise, and definitive research was needed.
The review question and inclusion criteria were clearly defined. Relevant databases were searched, but no mention was made of any searches for unpublished or grey literature, so it is possible that relevant studies may have been missed. No quality assessment was reported, so the extent of possible bias within the included studies is unclear. There was potential for error and bias within the review because study selection and data extraction were performed by one reviewer.

The author acknowledged several limitations to the individual studies, including few patients, inadequate baseline data, the exclusion of relevant patients, and short follow-up. The RCT reported that drain placement was more common in the treatment group (all 16 patients) than in the control group (one patient), which could have introduced confounding. The studies varied in the ways that they measured healing time and their surgical techniques; this clinical variation suggests that a narrative synthesis was appropriate. The lack of a control group, in most of the studies, means that it cannot be known whether fibrin glue was an effective addition to usual therapies.

The author’s conclusions reflect the evidence presented; limitations to the review methods and the evidence suggest that the first part of the conclusion may not be reliable. The recommendation for further research is warranted.

Implications of the review for practice and research

Practice: The author did not state any implications for practice.

Research: The author stated that research on treatment for pilonidal disease should continue to investigate the impact of the additional use of fibrin glue.

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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on
the reliability of the review and the conclusions drawn.