Three wound-dressing strategies to reduce surgical site infection after abdominal surgery: the Bluebelle feasibility study and pilot RCT

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Three wound-dressing strategies to reduce surgical site infection

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Plain English summary

Wound infections are common after surgery. Some are cured with simple treatment, but others may lead to serious problems. Reducing the risk of a wound infection is important. We do not know if the type of dressing, or not using a dressing, influences the risk of infection. A study that allocated patients to receive different dressings (or no dressing) would answer this question. We did preliminary research to explore whether or not such a study is possible.

We interviewed doctors, nurses and patients about their views on dressings and a future study. We also described dressings currently being used in the NHS and found that simple dressings and tissue adhesive (glue) ‘as-a-dressing’ are used most frequently. We studied existing evidence and interviewed experts to develop a questionnaire, completed by patients, to identify wound infections after patients leave hospital and tested its accuracy. We also explored taking photographs of wounds. We investigated whether or not a major study would be worth the cost and designed a pilot study to test its feasibility.

The pilot study recruited 394 patients undergoing abdominal operations in five NHS hospitals. These patients were allocated to have a simple dressing, glue-as-a-dressing or no dressing, and 92% received the allocated dressing method. Patients and their doctors and nurses found the dressing methods to be acceptable. We showed that the new patient questionnaire accurately identified infections. Patients or their carers also found it acceptable to photograph their wounds. Our research suggests that a future large study would be worth the investment and is possible.
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