Patch augmentation surgery for rotator cuff repair: the PARCS mixed-methods feasibility study

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.
Plain English summary

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Shoulder muscles and tendons allow us to move our arms to carry out daily activities, work and play sports. Disease and injury of these tendons can cause significant long-term disability. Early treatment of these tendon problems usually involves painkillers, injections and physiotherapy. However, many patients whose symptoms do not improve may need surgery to repair these tendons.

Unfortunately, around 40% of surgical tendon repairs fail within 12 months. As such, these operations need to be improved. A promising approach is to use a patch to support the repair while the tendon heals; this patch is often used in a similar way to a plaster. However, it is not yet clear whether or not using a patch improves patient health and, if so, whether or not it makes enough of a difference to justify the additional cost to the NHS.

A scientific study called a randomised controlled trial is needed to fairly assess the value of surgery with a patch in people requiring a tendon repair. This study must be carefully designed so that it is acceptable to patients and surgeons, among others, and feasible to run. We conducted a multistage study to explore whether or not a potential trial design could be achieved.

We searched the scientific literature for previous research that had studied using patches for repairing shoulder tendons. We surveyed shoulder surgeons, including those who had previously been involved shoulder randomised controlled trials. We conducted four focus groups with stakeholders. Initial agreement on the best way to run a randomised controlled trial of patches in shoulder surgery was achieved using online questionnaires. Finally, we held a 2-day meeting to scrutinise the study findings and the relevant issues. Two potential studies were recommended, as was the need for closer monitoring of patch safety.
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This report

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