Pressure garment to prevent abnormal scarring after burn injury in adults and children: the PEGASUS feasibility RCT and mixed-methods study

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Plain English summary

The PEGASUS feasibility RCT and mixed-methods study

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Plain English summary

Eleven million people suffer a fire-related injury worldwide every year. Seventy-one per cent of these people will have significant scarring. Pressure garment therapy (PGT) was first introduced as a part of scar management tools in the 1970s and has become a standard of scar management across the globe, with little evidence as to its effectiveness.

The PEGASUS (A mixed-methods feasibility study including a randomised trial of PrEssure Garment therApy for the prevention of abnormal Scarring after bUrn injury in adultS and children) study had two overlapping phases. The first phase consisted of an investigation of current UK practice and qualitative research to examine the patient and staff attitudes to a randomised controlled trial (RCT) of PGT and to identify aspects of scar outcomes that are most important to patients for a future trial. The estimated number of children and adults who receive PGT every year in the UK is 1476 and 1369, respectively, with the total cost to the NHS estimated to be £2,171,184 per annum. Although the majority of the staff surveyed supported a full-scale RCT of PGT, a large number of staff suggested that the trial is needed to support current practice rather than provide an evidence base for the best treatment.

The successful recruitment of 88 participants in seven centres in the UK to the planned time and target indicate that completion of a definitive future trial of the use of pressure garments in scar maturation is feasible in the UK NHS context. However, we identified that current positive attitude among staff to the use of pressure garments may lead to biases in recruitment and retention in treatment. Provision of training and support to sites and ongoing assessment of trial processes as part of a process evaluation are required to ensure that a future trial is executed according to protocol and will deliver valid results.

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