The Clots in Legs Or sTockings after Stroke (CLOTS) 3 trial: a randomised controlled trial to determine whether or not intermittent pneumatic compression reduces the risk of post-stroke deep vein thrombosis and to estimate its cost-effectiveness

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Plain English summary

The CLOTS trial

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Plain English summary

A stroke, due to either a blocked or burst blood vessel in the brain, may cause muscle weakness or loss of co-ordination. Someone who has a stroke and is unable to walk will usually need to be admitted to hospital. During their hospital stay, stroke patients who are unable to walk are at risk of developing blood clots in the veins of their legs (called deep vein thrombosis or DVT for short). These clots can break off and be carried in the bloodstream to the lungs (known as a pulmonary embolism) to cause breathing problems, which are sometimes fatal. The Clots in Legs Or sTockings after Stroke (CLOTS) 3 trial tested whether or not squeezing the legs with intermittent pneumatic compression (IPC) sleeves reduced the risk of DVT. The trial included 2876 volunteer patients, half of whom were randomly allocated to receive IPC and the other half to receive standard care. Patients allocated the IPC sleeve wore it for an average of about 12 days, day and night, but some wore it for up to 30 days. The patients who received IPC developed clots in their leg veins less often than those who did not receive IPC. Patients assigned IPC were less likely to die within 6 months of their stroke. The average cost of IPC is about £65 per patient. In summary, the CLOTS 3 trial has shown that IPC is an effective and inexpensive way to reduce the risk of DVT in stroke patients and it also improves their chances of survival.

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