

Dopamine Augmented Rehabilitation in Stroke (DARS): a multicentre double-blind, randomised controlled trial of co-careldopa compared with placebo, in addition to routine NHS occupational and physical therapy, delivered early after stroke on functional recovery

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†In memoriam

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Plain English summary

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Plain English summary

Stroke has a huge impact, and more than one-third of affected people will have moderate or severe disability that has an impact on quality of life and self-care. Rehabilitation, in the form of routine NHS physical or occupational therapy, promotes recovery of mobility through relearning to use the affected body parts and/or learning to compensate with the less affected side. However, many people are not able to walk despite physiotherapy. Small studies have found that certain drugs that affect the learning process may improve functional recovery and that this improvement occurs when the drugs are given at the same time as the therapy session. The Dopamine Augmented Rehabilitation in Stroke trial was designed to measure if combining these drugs with routine therapy leads to an improvement in the ability to walk independently 8 weeks after a stroke.

We allocated at random 593 patients with a stroke who were unable to independently walk ≥ 10 metres indoors to receive either a drug called co-careldopa or a placebo for 6 weeks, in addition to their routine therapy. We measured function and ability to walk at 8 weeks to see if the drug had an impact on recovery. We found that adding co-careldopa to routine physical and occupational therapy was not effective in improving walking following stroke. Further studies might consider using daily drug administration and more-intensive therapy. Future studies are needed to identify measures that identify new treatments to improve stroke recovery.

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