Femtosecond laser-assisted cataract surgery compared with phacoemulsification: the FACT non-inferiority RCT

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Plain English summary

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Cataract is a condition in which the natural lens inside the eye becomes cloudy, leading to loss of vision. In cataract surgery, the cloudy lens is replaced by a clear, artificial one. The standard surgical method (phacoemulsification) is carried out manually by the surgeon using ultrasound.

Part of the procedure can now be automated using a computer-controlled laser. This is called femtosecond laser-assisted cataract surgery (FLACS). The potential advantages of FLACS include greater precision reproducibility, but this new technique is more expensive than the standard surgery.

We performed a randomised controlled trial comparing the two techniques. We assessed vision, surgical complications, patient-related quality of life and cost-effectiveness at 3 and 12 months.

We found that the outcomes were almost identical for eyesight, quality of life and complications. Overall, the evidence suggests that the new technique is not worth the additional costs.
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This report

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