The UK EndoVascular Aneurysm Repair (EVAR) randomised controlled trials: long-term follow-up and cost-effectiveness analysis

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Plain English summary

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Plain English summary

Abdominal aortic aneurysm is the swelling of the main artery of the body conducting blood down through the belly to the legs. Unfortunately this vessel, the aorta, can expand and burst. To prevent this, a big operation requiring open surgery has been used since 1951. Since the mid-1990s, it has been possible to offer patients a less invasive procedure by placing a device within the swollen aorta to strengthen it from within.

The problem is that we did not know how long these devices last and whether or not they can do the job as well as the open operation over many years.

Early results suggested that there was a lower risk of death associated with aneurysm repair using the new device than having the big open operation. After some 5–10 years, this early advantage was lost and so we followed up patients for up to 15 years to see what the end result would be.

We have found that the new device was not as durable after 8 years as the open operation and, based on this evidence, the device might not be considered value for money in the UK. This was partly because of inadequate follow-up and monitoring. We shall now recommend more regular assessment of the new method.

However, for patients who are not fit enough for open repair, although the length of life is not altered, there is some evidence that the new device prevents the aorta from bursting and is effective in that respect.

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