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Title **Routine follow-up may not be needed for people undergoing joint replacement surgery**

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Why was the study needed?

Hip or knee joint replacement usually improves quality of life and mobility for people with degenerative joint disease. Occasionally, problems such as pain or difficulty doing everyday activities arise after surgery, which may signal a problem with the replacement.

Follow-up appointments are intended to find problems early. But offering these appointments to everyone after surgery is expensive. Many hospitals have reduced or stopped routine follow-ups, and the consequences for patients are not known.

What did the study do?

Researchers explored whether it is safe to stop follow-up appointments after surgery. They looked at when people are most likely to develop problems, and what impact early follow-up has on when people have revision surgery.

What did it find?

Analysis of national datasets that include more than 350 000 people showed that few knee replacements (5%) or hip replacements (3-6%) needed revision. Another analysis (of primary care data on 10 000 people with replacement joints) indicated that those who attended routine follow-up appointments were more likely to have revision surgery (than those who had no follow-up).

The team discussed their results with a panel of surgeons, GPs, and people with a joint replacement.

They considered people who:

- Had straightforward surgery (first surgery, for example)
- Received a joint recommended by the National Institute for Health and Care Excellence (NICE)
- Had rapid access to an orthopaedic review if they developed symptoms.

Together, they recommended that, for this group:

- Routine follow-up is not needed for 10 years
- Ten years after surgery, people should have x ray imaging to assess the joint, and a clinical assessment including questionnaires on pain and mobility
- The results of the 10 year assessment should influence later follow-ups.

People with complications or who have received a different type of replacement may need earlier follow-up.

Why is this important?

This study suggests that most people who have a joint replacement do not need follow-up in the first 10 years after their surgery.

The group interpreting the findings included people with lived experience of joint surgery and follow-up. The researchers hope clinicians and patients alike will find the results reassuring. They provide evidence to support the changes they may have seen in practice.

Up to half (30-50%) of the replacement joints used in surgery are not recommended by UK guidance, which may be because of the surgeon's preference. The researchers' recommendations only apply to replacements recommended in NICE guidance.

The researchers say that people need to know what to look out for after their surgery. They should make an appointment with their orthopaedic service if they have worsening pain, or any other red flags (such as difficulty with walking).

In this study, people who attended routine follow-up appointments were more likely to have revision surgery than those who had no follow-up. The researchers suggest that people who have no pain or discomfort may be less likely to attend follow-up appointments.

What's next?

The recommendations depend on rapid access to an orthopaedic service without having to be referred by the GP. Further research could explore how best to deliver such a service, and whether virtual clinics could be more convenient and less costly than face-to-face follow-ups.

Previous studies have shown that people from more deprived backgrounds are less likely to have revision surgery for knee replacements. One concern is that reduced follow-up appointments could widen health inequalities. Further research could identify groups of people who are more likely to need revision surgery, so that they could receive targeted follow-up.

Few data are available beyond 10 years. More research 20 to 30 years after a joint replacement could be relevant to people having surgeries at younger ages.

References

1. Smith LK, Garriga C, Kingsbury SR, et al. UK post arthroplasty follow-up recommendations (UK SAFE): what does analysis of linked, routinely collected national data sets tell us about mid-late term revision risk after hip replacement? Retrospective cohort study. *BMJ Open* 2022;12:e050877.
2. Smith LK, Garriga C, Kingsbury SR, et al. UK post arthroplasty follow-up recommendations (UK SAFE): what does analysis of linked, routinely collected national data sets tell us about mid-late term revision risk after knee replacement? *BMJ Open* 2022;12:e046900.
3. National Institute for Health and Care Excellence. Total hip replacement and resurfacing arthroplasty for end-stage arthritis of the hip. 2014. <https://www.nice.org.uk/guidance/ta304>
4. Versus Arthritis. <https://www.versusarthritis.org/campaign-with-us/joint-replacement-support-package/>