Sending NHS patients for operations abroad: is the holiday over?

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ABSTRACT

INTRODUCTION The UK Department of Health, in its attempt to help NHS trusts reduce long elective waiting lists, set up the overseas commissioning scheme in 2002. This allowed hospitals to send their patients abroad for their surgery. In theory, this was a win-win situation, where pressures upon surgeons were reduced, and trusts could reach UK Government targets and avoid breaches. At our hospital, a significant number of patients, who had undergone a total joint replacement abroad, were discharged after only one postoperative review and often had very little physiotherapy. A few presented to our clinic with more serious problems.

PATIENTS AND METHODS This is a retrospective review of two matched groups of patients (22 each), all of whom underwent a total knee replacement in 2003. The first group (abroad, Belgium) included 10 males and 12 females with a mean age of 74.5 years and a mean follow-up of 37 months. The second group (local institution) included 10 males and 12 females with a mean age of 71.4 years and a mean follow-up of 34 months. All patients were evaluated using the Oxford Knee Score (OKS), Knee Society Score (KSS), and SF-12 systems.

RESULTS OKS and KSS were similar in the two groups. However, SF-12 figures revealed a statistically significant difference in both the physical (PCS) and mental components (MCS). Belgium group – mean PCS 40, mean MCS 48; local group – mean PCS 47, mean MCS 57; $P < 0.05$.

CONCLUSIONS The results demonstrate that, although the majority of patients operated upon abroad got comparable functional results to patients operated locally, they often felt dissatisfied with the overall experience of travelling for their operation. Furthermore, the issues of 'patient ownership' and long-term follow-up need to be fully addressed in order to safeguard the high standard of care we should offer our patients.

KEYWORDS

Health tourism – TKR – OKS – KSS – SF-12

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In 2002, the UK Department of Health, in its attempt to reduce long waiting lists for elective procedures, set up the NHS Overseas Commissioning Scheme.¹ This system facilitated the purchase of a number of healthcare services abroad by NHS trusts. 'Suitable' patients on waiting lists were identified locally and offered the opportunity to travel abroad to have their surgery, which in the majority of cases was an orthopaedic or cardiac procedure. In theory, this was seen as a win-win situation, where pressures upon surgeons were reduced and trusts could reach UK Government targets and avoid breaches. Unfortunately, it was not until patients had returned home from their surgery that problems with this method of waiting list reduction were realised. A significant number of patients from our trust, who had undergone a total joint replacement abroad, were discharged after minimal follow-up and very little physiotherapy. A few presented to our clinic with more serious problems. In this study, we examine the clinical and functional outcomes in a group of patients who underwent a total knee replacement in Belgium in 2003 and compare them to a

group of patients operated upon in a local institution. We discuss the implications of sending NHS patients for operations abroad.

Patients and Methods

This is a retrospective review of two age- and sex-matched groups of patients, all of whom underwent a total knee arthroplasty between April and December 2003. The first group (Belgium) included 10 males and 12 females with a mean age of 74.5 years (range, 64–81 years) and a mean follow-up of 37 months (range, 32–40 months). The second group (local institution) included 10 males and 12 females with a mean age of 71.4 years (range, 60–84 years) and a mean follow-up of 34 months (range, 28–36 months). We obtained clinical data from case notes, clinic reviews and patient questionnaires.

All patients were evaluated using the Oxford Knee Score (OKS),² Knee Society Score (KSS),³ and SF-12 scoring systems.⁴

Figure 1 Infected total knee replacement requiring a two-stage revision and intravenous antibiotics at 25 months' postoperatively.

Implant and approach

Patients in the Belgium group received an uncemented Low Contact Stress (LCS) prosthesis from DePuy (Leeds, UK) through a mid-subvastus approach. The local patients received a cemented NexGen prosthesis from Zimmer (Warsaw, IN, USA) through a medial para-patellar approach. The patella was not resurfaced in either group.

Results

Functional scores

Table 1 summarises the scores achieved in both groups. OKS and KSS in the Belgium group were 24.7 and 72.7 respectively,

compared to 25 and 79 in the local group ($P > 0.05$). The SF-12 scores were as follows: PCS 40, MCS 48 (Belgium); PCS 47, MCS 57 (local). The difference in both components was statistically significant ($P = 0.039$ and $P = 0.025$, respectively).

Complications

Four complications occurred in the Belgium group at a mean of 16 months postoperatively. An early wound dehiscence was treated by debridement and re-closure. One patient had a persistent fixed flexion deformity of 10° requiring an MUA (manipulation under anaesthesia) and physiotherapy at the

Table 1 Functional scores in both groups of patients

	Belgium	UK
Oxford Knee Score	24.7	25
Knee Society Score	72.7	79
SF-12 physical	40	47
SF-12 mental	48	57

Table 2 Complication costs (estimated figures)

Two-stage revision for infection	£20,000
One-stage revision for aseptic loosening	£13,000
MUA	£1500
Wound debridement	£1500
DVT (USS + warfarin)	£500

DVT, deep vein thrombosis; MUA, manipulation under anaesthesia
USS, ultrasound scan

local hospital. There was one case of aseptic loosening of the uncemented tibial component, which was treated locally by a revision procedure at 27 months. Finally, there was one case of septic loosening with gross migration of the tibial component (Fig. 1). This was treated by a two-stage revision during which a 6-week course of intravenous antibiotics (cefuroxime and teicoplanin) was administered. In contrast, there was one complication in the local group. This was a case of an early deep vein thrombosis, which was treated with heparin and warfarin.

Discussion

In this study, the patients who were operated upon abroad got comparable functional results to those operated upon locally. This was reflected by the similar OKS and KSS achieved in both groups. However, the SF-12 scores differed significantly, particularly the mental component (48 and 57, respectively). The SF-12 system represents a patient-subjective assessment of quality of life, especially from an emotional and psychological point of view.⁴

Our results may be explained by the concerns that most of the Belgium patients expressed to us during their clinic interview. Because no follow-up arrangements were made at their local hospital, they often felt as if they were 'lost' in the community with no one to seek help from in case things went wrong. The first point of contact, in case a complication was to occur, would be the patient's general practitioner. This is not ideal, especially when taking into account the increasing pressure on general practitioners to see new patients and meet UK Government targets. Moreover, many orthopaedic surgeons recommend that arthroplasty patients must remain under constant review, where they can be seen by a specialist team with access to imaging and senior surgical support, who have the expertise to intervene at an early stage to avoid later morbidity.⁵ The British Orthopaedic Association (BOA) guidelines state that:⁶ 'for best practice, arthroplasty patients should be followed up clinically and radiologically in the long term'. It also states that 'the minimum follow-up required for TKR patients is an AP and lateral radiograph at 5 years, and each five years thereafter'. This regular follow-up allows orthopaedic surgeons to diagnose silent failure which might otherwise be missed, such as aseptic loosening, which is initially asymptomatic in the majority of cases. Radiological signs in this condition may precede symptoms by months or even years.⁷ Early detection allows performing revision procedures before bone loss and/or periprosthetic fractures occur. Many authors have shown that revision surgery for periprosthetic fractures, or with poor bone stock carries higher costs and mortality rates.⁸

Of note was that complication rates were higher in the Belgium group, with a revision rate of 9% and a re-operation rate of 18%. On average, the cost of a primary total knee replacement in Belgium was £6500 (22 patients –

£143,000), compared to £7000 (22 patients – £156,000) at our hospital. A two-stage revision for infection including investigations, the implant, theatre time, in-patient stay, and 6 weeks of intravenous antibiotics costs on average £20,000. Similarly, the cost of a one-stage revision for aseptic loosening is around £13,000. Table 2 summarises the cost associated with treating each occurring complication.

Taking the above into consideration, the overall treatment cost increases to £180,000 in the Belgium group and £156,500 in the local group. These figures clearly show that the treatment was made significantly more expensive by sending the patients abroad, with the British taxpayer bearing the cost of early unnecessary revision surgery. We realise, however, that our numbers are not sufficient to draw any definite conclusions.

Finally, we believe the surgery abroad in this study is bordering on ethically unacceptable. If a UK surgeon had such a high complication rate, someone would certainly 'blow a whistle'. This raises the issue of whether surgeons operating on NHS patients abroad are actually appraised in the same way that UK surgeons are.

Conclusions

Although 'health tourism' represents a quick and effective way of reducing long waiting lists, it is only a quick fix, short-term solution. The lack of postoperative follow-up arrangements is a reason for concern and this should be fully addressed. 'Patient ownership' in these cases is unknown and this, we believe, has an adverse effect on the standard of care we offer our patients as orthopaedic surgeons.

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