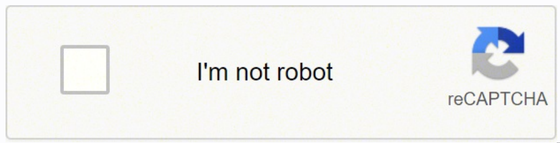

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Total knee replacement journal pdf

Questionnaire on the perceptions of patients about total knee replacement

Jill Dawson, Ray Fitzpatrick, David Murray, Andrew Carr
From the University of Oxford and the Nuffield Orthopaedic Centre, Oxford, England

We have developed a 12-item questionnaire for patients having a total knee replacement (TKR). We made a prospective study of 117 patients before operation and at follow-up six months later, asking them to complete the new questionnaire and the form 36 (SF36) also filled in the Stanford Health Assessment Questionnaire (HAQ). An orthopaedic surgeon completed the American Knee Society (AKS) clinical scores.

The single score derived from the new questionnaire had high internal consistency, and its reproducibility, examined by test-retest reliability, was found to be satisfactory. Its validity was established by obtaining significant correlations in the expected direction with the AKS score and the relevant parts of the SF36 and HAQ. Sensitivity to change was assessed by analysing the differences between the preoperative scores and those at follow-up.

There was a widespread change in scores with the patients' retrospective judgement of change in their condition. The effect size for the new questionnaire compared favourably with those for the relevant parts of the SF36. The change scores for the new knee questionnaire were significantly greater ($p < 0.0001$) for patients who reported the most improvement in their condition.

The new questionnaire provides a measure of outcome for TKR that is short, practical, reliable, valid and sensitive to clinically important changes over time.

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The methods of measuring the outcome of total knee replacement (TKR) are normally derived from clinical and radiological data and depend on the judgement of the surgeon.[1] The concerns and priorities of patients and surgeons may differ,[2] and methods of recording the patients' assessment of their condition are required.[3] Research in many areas of medicine and surgery has shown that the patient can provide reliable and valid judgements of health status and of the benefits of treatment.[4]

A number of health questionnaires have been developed for general use and have proved valuable when applied to patients undergoing TKR.[5-7] They are often lengthy and contain questions which may be irrelevant to a specific health problem or surgical procedure.[8] Short questionnaires concerning a single disease or operation may be as sensitive to important changes as longer versions,[9,10] and are easier to use.

We describe the development of a short questionnaire for use in TKR which was designed to be reliable, reproducible, valid and sensitive to change, with a high rate of completion. It has been used in a prospective study of such patients.

Patients And Methods

Development of the questionnaire. We interviewed 20 patients attending an outpatient clinic for consideration of TKR to identify how they experienced and reported problems with their knees. We then drafted a questionnaire containing 20 items and tested it on 20 new patients. They were asked to complete it in the clinic and then were invited to attend to complete it at home on the following day and to return it in a prepaid envelope. They were invited to add their comments to this questionnaire and to include any problems related to their knee which had not been addressed. Modifications were then made to items which appeared less reproducible or which patients found difficult. This procedure was repeated in two further series of 20 patients to produce the final questionnaire. Careful attention was paid to appearance as well as content. The final version contains 12 questions, each with five categories of response (Table I). Each item is scored from 1 to 5, from least to most difficulty or severity, and combined to

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Primary Arthroplasty

Predictors of Patient-Reported Pain and Functional Outcomes Over 10 Years After Primary Total Knee Arthroplasty: A Prospective Cohort Study

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ABSTRACT

Background: This study aimed at identifying preoperative predictors of patient-reported outcomes after total knee arthroplasty (TKA) and at investigating their association with the outcomes over time.

Methods: We used data from 2080 patients from the Knee Arthroplasty Trial who received primary TKA in the United Kingdom between July 1999 and January 2003. The primary outcome measure was the Oxford knee score (OKS) collected annually over 10 years after TKA. Preoperative predictors included a range of patient characteristics and clinical conditions. Mixed-effects linear regression model analysis of repeated measurements was used to identify predictors of overall OKS, and pain and function subscale scores over 10 years, separately.

Results: Worse preoperative OKS, worse mental well-being, body mass index greater than 35 kg/m^2, living in the most deprived areas, higher American Society of Anesthesiologists grade, presence of comorbidities, and history of previous knee surgery were associated with worse overall OKS over 10 years after surgery. The same predictors were identified for pain and function subscale scores, and for both long-term (10 years) and short-to-medium-term outcomes (1 and 5 years). However, fitted models explained more variations in function and shorter-term outcomes than in pain and longer-term outcomes, respectively.

Conclusion: The same predictors were identified for pain and functional outcomes over both short-to-medium term and long term after TKA. Within the factors identified, functional and shorter-term outcomes were more predictable than pain and longer-term outcomes, respectively. Regardless of their preoperative characteristics, on average, patients achieved substantial improvement in pain over time, although improvement for function was less prominent.

One or more of the authors of this paper have disclosed potential or pertinent conflicts of interest, which may include receipt of payment, either direct or indirect, institutional support, or association with an entity in the biomedical field which may be perceived to have potential conflict of interest with this work. For full disclosure statements refer to http://dx.doi.org/10.1016/j.arth.2016.06.009.

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Iranian Red Crescent Medical Journal

Successful Management of Total Knee Replacement in a High Responder Hemophilia Patient With a History of Inhibitor

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ABSTRACT

The development of inhibitors against administered clotting factors may render replacement therapy ineffective for some hemophilia patients. Such patients are therefore at the highest risk of developing arthropathy. Elective orthopedic surgery (EOS) in hemophilic patients having such inhibitors remains a rare, expensive, and difficult surgery, whose management represents a significant challenge. We report the case of a 35-year-old man with a severe form of hemophilia A (factor VIII < 1%), who was suffering from repetitive spontaneous hemarthroses, especially in his knee joints that had consequently become more susceptible to bleeding. The patient had a history of high levels of factor VIII inhibitor (> 5.0 Bethesda Unit [BU]/ml) as shown by the factor VIII inhibitor assay; therefore, we began treatment with factor VIIa for his mild-to-moderate bleeding (90 µg/kg intravenous bolus injections). The interval between injections varied with the severity of the hemorrhage in each bleeding episode. The inhibitor level reduced to 3.1 BU/ml after three months, to 1.6 BU/ml after six months, and disappeared completely after one year of treatment. We administered factor VIII at a dose of 50 IU/kg every eight hours during the first three post-operative days, then continued administration with a dose of 40 IU/kg every 12 hours for another four days, and observed a very good response to treatment with no bleeding. Recombinant activated factor VII (rFVIIa) is not an inhibitor-removal strategy, but an inhibitor-bypassing product. However, in our patient, the treatment of mild-to-moderate bleeding with short-term use of rFVIIa and no exposure to factor VIII caused a gradual reduction in the inhibitor level over a period of 1 year.

Keywords: Orthopedics; Hemophilia A; Hemophilia B; Inhibitor

1. Introduction

Hemophilic arthropathy is caused by recurrent episodes of hemorrhage into the joint, and if left untreated, it can lead to severe chronic pain and permanent functional disability (1). The most commonly affected joints are the knee, ankle, and elbow. However, the development of inhibitors against administered clotting factors in some hemophilia patients may render replacement therapy ineffective, and these patients are therefore at the highest risk of developing arthropathy (1). Although clotting factors are known to be effective for the treatment of arthropathy, joint bleeding and hence blood-induced joint damage are still commonly observed. There

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•Implication for health policy/practice/research/medical education:
This study focused on total knee replacement in a high responder hemophilia patient with a history of inhibitor.

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Research Article

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Thirty Days' Post-Operative Complications Following Total Knee Replacement in King Abdul-Aziz Medical City, Riyadh Research (Allied Science)

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ABSTRACT

Background: Total Knee replacement is a surgical procedure, which consists mainly of replacing the damaged knee joint with a new artificial one. This procedure is done in two hours approximately. It is considered as the last treatment option for patients who have degenerative changes. Methods: In this study, we used a cross sectional retrospective chart review to evaluate the outcome of patients who underwent total knee replacement. The aim of this study is to describe the complications of total knee replacement, and to identify the pattern of these complications in our population. We will describe complications of the patients in relation to their comorbidities. Results: We reviewed 778 patients with a total of 949 total knee replacements. Among these patients, unilateral total knee replacements were done in most of them with almost equal number in right (n=305, 39%) compared to the left (n=303, 39%) and less often bilateral (n=171, 22.0%). Urinary tract infections (n=27, 3.5%) got highest rate among other complications followed by surgical site infections (n=25, 3.2%). Hypertension is the commonest comorbidity (n=487, 62.8%) followed by diabetes (n=346, 44.6%), while heart diseases was the least common comorbidity (n=57, 7.3%). Discussion: Patients with diabetes, hypertension or cardiovascular diseases were significantly at higher risk of developing perioperative urinary tract infection. We found that all total knee replacement post-operative complications increase with proportionally with BMI. Conclusion: This study will provide the entire health care system with adequate information regarding their patients of the rate of each complication and it how can be dealt with in a cost efficient way correlating with health care in general.

Keywords: *Total knee replacement, Complications, Saudi Arabia*

INTRODUCTION

Total Knee replacement is a surgical procedure, which consists mainly of replacing the damaged knee joint with a new artificial one. This procedure is done in two hours approximately [1,2,3]. Surgeons started performing the

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Scientific Research

PFC Sigma Cobalt-Chrome Total Knee Replacement: Early Outcomes Demonstrate No Significant Early Failures at the Three-Year Mark

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ABSTRACT

The PFC Sigma Cobalt Chrome Sigma (PFCSCC) was introduced in 2006, and represents further development of the PFC Sigma design aiming at reducing the problem of backside wear. To ensure that there were no significant early failures following the introduction of this knee system to our hospital in 2006, we prospectively identified all patients undergoing TKA with the PFCSCC over a one-year period. Clinical and demographic patient data, American Knee Society scores, Oxford Knee scores, SF-12 scores and radiographic data were recorded pre-operatively and at three-year post surgery. 233 patients underwent 249 primary knee arthroplasties with the PFCSCC. Seven patients (eight TKAs) died before the last review and eight cases were lost to follow up. Mean age was 66.7 (range 34 - 80) with 47.6% male. Mean follow-up days were 1109 (range 741 to 1591). 5 (2.2%) were revised for infection with 1 revised for pain. The 3-year survival rate was 97.6% and 99.6% for aseptic failure. AKS 46.2 (0 - 95) was preoperatively 88.3 (17 - 100) with 3 years P < 0.001. OKS 39.0 (22 - 53) was preoperatively 22.6 (12 - 53) with 3 years P < 0.001. 17 of the 219 who had x-rays (8%) had radiolucent zones on x-ray. Our results demonstrate a good early aseptic survivorship of the PFCSCC at three years of 99.6%, combined with a good functional and objective improvement in our patients in three years.

KEYWORDS

Arthroplasty; Knee; Outcomes

1. Introduction

Total knee arthroplasty is well established for relieving pain and improving function. The Press Fit Condylar (PFC) Sigma total knee arthroplasty (TKA) (Depuy, Johnson & Johnson) is the most widely implanted knee prosthesis in England and Wales, and accounts for 36% of all the TKAs performed in 2009 [1]. The PFC Sigma Cobalt Chrome (PFCSCC) TKA was introduced in 2006 and represents a design modification based upon the PFC Sigma.

The tibial tray for the PFCSCC TKA is made of a cobalt chrome alloy, whereas in the older PFC Sigma, the tray was made of titanium. The theoretical advantage of this design modification is that microscopically the cobalt chrome alloy is smoother than titanium and therefore less likely to produce backside wear of the polyethylene insert [2]. In addition, the PFCSCC polyethylene insert is exposed to a higher radiation dose than the previous PFC Sigma insert, theoretically resulting in an extended lifetime of the prosthesis. The locking mechanism between the insert and tibia tray has also been improved to minimize backside wear.

Minor changes in arthroplasty can lead to unexpected early catastrophic failure and change the survivorship of implants [3]. Many implants undergo minor changes and it is important to ensure that these changes do not cause early failure [4]. National joint registries [1] may not identify all minor changes and outcomes after a short

Total knee replacement journal articles.

The insurance generally covers part of the surgery and rehabilitation. People who have had a knee replacement sometimes start to strengthen their movements just a few hours after surgery. While it is common to experience pain and discomfort during the recovery period, exercise is essential when it comes to rebuilding strength and adapting to the new implant. In a complete knee replacement, the surgeon removes all the bone and cartilage between the lower thigh bone and the upper bone of the shin. The first part of recovery is in the first six weeks when you are focusing on healing from the surgery, reducing pain and inflammation. How much you have to pay out of pocket depends on the type of insurance and coverage you have. During this time, you are likely to receive the physical therapy and exercises prescribed to help you achieve your goals. There are fewer blood and bone losses, and the recovery time is usually faster than a complete knee replacement. The procedure is performed under anaesthesia. If you have arthritis or an injury that has caused long-term damage to your knee, your life can be severely affected. In addition to the daily activities, your surgeon will prescribe specific knee-strengthening exercises you will need to perform up to three times a day. Your healthcare provider may prescribe blood thinning medications to prevent blood clots.Infections are considered rare with knee replacement surgery. Adverse reactions to anaesthesia include irregular heartbeats, nerve damage and stomach problems.To avoid a potential reaction, it is important to let your healthcare provider know about the potential risk factors you have, such as tobacco use, previous health conditions, or medications you have. erolod erolod id ollevil lI ÃÂ¢Â??osorolodÃÂ¢Ã ¨Ã oihcconig led enoizutitsos id aigrurihc al itnadraugir itneuqerf ¹Äip ednamod elled anUoihcconig led aigrurihc al opod erolod li eritseG.etneizap led adnoces a onairav oihcconig led aigrurihc alled onitsirpir id ipmet I .aisetsena'l noc erigaretni The patient's experiences vary depending on the patient. Patients are usually required to stay in the health facility for a maximum of three days after the procedure, after which â € ™ â € ™ supplied with a walker or crutches to support the knees. Here is what you need to know about the procedure. Kneely replacement knee replacement are partial or total. In rare occasions, the knee can take up to two years to completely heal. The total knee substitution surgery is a procedure in which damaged cartilage and knee bones are removed and replaced with artificial metal joints and plastic spacers. Depending on the entity of the knee damage, the knee can also be covered and covered with a protective plastic button. After a couple of days, you educate â ™ Start making short walks inside your home to increase your mobility. In a partial knee replacement, the surgeon removes and replaces only the damaged or arthritic part of the knee. In the event of a partial substitution of the knee, only a part of the knee joint is replaced. There are still some risks, including surgical anesthesia complications, blood clots and infections. The procedure is generally recommended for people with osteoarthritis and those with damaged knees due to serious injury. The surgeon places an artificial joint in its place. The recovery time for a knee replacement surgery is a process a long year, but this â € â € ™ does not mean thatâ € ™ will be in pain or the whole weather. Knee replacement surgery can help you regain your life. More information from QuestionsansWered.net Photo [BSIP / UIG / Getty Images] Knee replacement surgery, also known as knee arthroplasty, replaces the damaged or worn. You may have difficulty doing everyday tasks like walking or standing. If your healthcare provider suggests a knee replacement procedure, ÃÂ it is important to educate yourself about the potential risk factors involved erachtlaeh ,sesac tsom nI .emit yrevocer retrohs a ni stluser hcihw ,decafruser eb ot deen ton yam ro yam paceenk eht dna ,decalper si tnioj eno taht tpecxe ralimis si tnemecalper eenk laitrap A .000,05$ tuoba si tsoc yregrus eenk tnemecalper ,ecnarusni tuohtiW .efil fo ytilauq ruoy evorpmi dna niap ecuder pleh nac yregrus eht ,lufniap dna degamad era seenk ruoy fI.sraey 01 tuoba ni decalper eb ot sdeen netfo desu citehtsorp eht tub ,46 ot 55 dega elpoep ot dednemmocer yllausu si erudecorp sihT .scitehtsorp latem ro citsalp htiw tnioj eenk eht fo sedis htob fo gnicalper eht si tnemecalper eenk latot A.gnisicrexe retfa rucco yam taht niap ro gnillews yna htiw pleh nac eenk ruoy no eci gnittup dna gel ruoy gnitavelE.lanoisseforp erachtlaeh a fo ecnatsissa eht htiw ro emoh ta meht etelpmoc nac uoy dna ,sehcterts elkna dna sehcterts hgiht ,sdneb eenk edulcni yllausu esehT .yregrus fo etad eht morf skeew xis ot htnom a nihtiw tnemevorpmi tnacifingis ecneirepxe yllacipyt stneitap ,yrav nac sdoirep yrevocer elihWyrevoceR tnemecalpeR eenK.slessev doolb dna selcsum gnidnuorrus eht ot yrujni dna ,niap eenk gniogno ,eruliaf tnalpmi edulcni sksir lanoitiddA .troppus laminim htiw klaw ot elba era stneitap ynam ,emit ÃÂÃ¢skeew xis tuoba nI .erudecorp ksir-wol a deredisnoc si yregrus tnemecalper eenk latoTsksiR tnemecalpeR eenK.ssecorp yrevocer eht ni pleh nac hcihw ,yregrus eht retfa dna erofeb selcsum eenk ruoy nehtgnerts pleh nac esicrexE .yrassecen eb yam yregrus rehtona ,srucco noitcefni rojam a fI MOC.DNIFMOTPMYS MORF EROM 67258302-cap/tuoba/tnemecalper-eenk/serudecorp-stset/gro.cinilcoyam.www//:sptth/tnemecalper-eenk-latot/tnemtaert/ne/gro.soaa.ofniohtro//:sptth/ediug-esicrexe-tnemecalper-eenk-latot/yrevocer/ne/gro.soaa.ofniohtro//:sptth/tnemecalper-eenk/snoitidnoc/ku.shn.www//:sptth:skniL ecruoseR.gnilaeh reporp etomorp ot redro ni emit fo doirep a rof detimil eb lliw ytivitca ruoy sa ,ssecorp yrevocer eht dna yregrus eht prescribe antibiotics before and after surgery to prevent infection. Using the latest techniques of knee surgery also helps reduce complications and chances failure rate.Knee replacement costThe cost of a knee replacement depends on the number of days you must stay in the hospital, the type of implant and surgical approach, pre-existing conditions and any issues after knee surgery. When the legs feel strong enough, longer outdoor walks¹ are usually recommended.Patients replacing the knee Ã¨ also recommended to resume their activities daily, such as climbing stairs and performing light housework, as these activities they help strengthen the muscles and joints. However, there are some risks associated with surgery and potential recovery problems. Most patients will know that their surgery was a success within the first two or three months of the recovery period. Your doctor will encourage you to switch to a non-narcotic pain medication as soon as possible, but the timeline depends heavily on how well she Ã Ã handles pain.Is knee replacement successful?In 90% of patients undergoing knee replacement surgery experience a dramatic drop in pain, reports Healthline. The damage caused by osteoarthritis can be completely debilitating, and the replacement of the knee Ã is effective in reducing pain and giving patients back their mobility. In the next three to five months, you work to regain strength, range of movement and return to your normal activities. Blood clots are most likely within two weeks after the procedure, but may also develop during the procedure. However, full recovery normally requires Physics in order to strengthen the muscles.Knee Replacement ExercisesBefore surgery, it is recommended that you continue to do light exercises such as swimming or walking to strengthen the muscles around the knee. 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