

Sexual Activity before and after Total Hip Arthroplasty

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Abstract

Introduction: Sexual life is an important component of the quality of life. However, it is frequently neglected aspect in patients with hip osteoarthritis. The aims of the study were to evaluate the influence of the total hip replacement (THR) surgery on the quality of sexual life (QSL).

Methods: a retrospective study using an anonymous questionnaire administered to 270 patients in a face-to-face interview at physical medicine and rehabilitation department.

Results: The mean age when sexual difficulties began was 45 years (range: 21-63) two years after hip pain occurred. Sexual difficulties were considered severe to major by 19% of patients. The main causes of sexual difficulties were pain, then joint stiffness. Patients with the most pronounced and early sexual repercussions were young women with hip dysplasia. In patient's opinion, the implementation of THR improves sexual relations. The frequency of intercourse was increased after THR significantly more frequently in women than in men, due to a change in coital position. Only 17% of patients had information about sexual activity before/after THR.

Conclusion: Sexual difficulties should not be marginalized, but should be assessed before and after surgery. It is the role of a multidisciplinary team: surgeon, physiatrist and physiotherapist as they should provide clear information.

Keywords Total hip replacement; Sexual activity; Patient information; Education; Osteoarthritis; Sex position; Quality of life; Rehabilitation

Introduction

More than 1 million THR is performed per year, and this number tends to double in the next 2 decades [1-3]. The aim is to acquire indolence, mobility and improvement of quality of life.

Sexual activity is an integral part of quality of life and affects it [4,5]. Its dysfunction is strongly associated with physical and emotional dissatisfaction and depression [6]. Restricted movement, pain and fear of dislocation will significantly affect sexual activity. We should notice that sexual problems themselves can be an indication to THR [7].

THR significantly improves quality of life of individuals compared to patients not treated with severe hip osteoarthritis [8]. Sexual satisfaction and performance's improvement were reported after successful THR in several studies [7,9-11]. However, it is clear that sexual activity's problem in patients with THR are underestimated and should be looked for by medical staff, even if patients do not ask explicitly [12].

This study was conducted mainly to evaluate the quality of sexual life. It compares pre- and post-THR within Moroccan patients in order to determine if patients were educated on sexual activity after THR.

Methods

In our study we used an anonymous questionnaire administered during a face-to-face interview from March 2013 to December 2016 at physical medicine and rehabilitation department of IBN ROCHD University Hospitals. Inclusion criteria were a married status, an age of ≤ 65 years at the time of the study and primary THR of more than 6 months before the beginning of the study. Exclusion criteria included severe comorbidities, not having sexual activities during the previous.

The patients with a history of postoperative complications (deep infection, fracture, dislocation, or revision for any reason) were also excluded. The surgery was performed by the same team of surgeon using a posterior lateral approach.

Our questionnaire took up the items devised by Currey [11] and Meyer et al. [13], associated with the functional scale of Womac [14].

To facilitate interpretation, the proposed responses to the Currey questionnaire were adapted to the five-point Lickert scale by placing a cross in one of the boxes (none, minimal, moderate, important, major) corresponding to the scores of 0, 1, 2, 3 and 4. The most comfortable post-operative and postoperative sexual positions were investigated among the 12 postures used in the article reported by Dham et al. [15].

Statistical analysis was performed using Statview[®] software (Version 5.0, California, and United States). The quantitative variables were compared using the Wilcoxon nonparametric test or the Mann-Whitney U test. The Chi² test or the exact test of Fischer was used for the comparison of variables qualitative. The threshold of statistical significance was p of less than 0.05.

Results

We had 270 patients who undergone THR, 116 women and 154 men. The clinical and demographic characteristics of patients are summarized in Table 1. The mean age when sexual difficulties started was 45 years (range: 21-63) two years after hip pain occurred (Table 2). Sexuality is altered earlier with statistical significance in dysplasia of hip compared to primary hip osteoarthritis ($p=0.003$), aseptic osteonecrosis ($p=0.03$) and secondary hip osteoarthritis ($p=0.07$).

Dysplasia of hip, which mainly affects young women, is the disease with the earliest sexual repercussion, while primary hip osteoarthritis is the one with the later sex repercussion. Of those patients with sexual difficulties, the most common reason given was a hip/back pain (37.4%), followed by a limitation of motion (36.3%) (Table 3).

Preoperatively, women were significantly more sexually disabled than men ($p=0.004$) (Table 4). But postoperatively, there were no differences ($p=0.13$). Sexual difficulties were behind patient's decision to undergo THR only in 18.5% of patients. This percentage reaches 36% in patients with hip dysplasia.

Mean time to the resumption of sexual activity was 66.5 days (range: 4-365) after THR. 5 patients never resume sexual activity. It occurred significantly later in women (87 days) than men (54 days, $p=0.0005$). Diagnosis had no impact on this delay. Number of patients without sexual difficulties or minimal difficulties was 54% before THR and 74% after THR.

Characteristic	No. of patients (%)
Sex	
Male	154 (57%)
Female	116 (43%)
Age (average, min-max)	51.5 (21-65)
Time after total hip replacement	
6 months-1 year	78 (28.8%)
1-2 years	97 (36%)
>2 years	95 (35.2%)
Diagnosis	
Osteonecrosis of femoral head	98 (36.3%)
Primary hip osteoarthritis	112 (41.5%)
Secondary hip osteoarthritis	18 (6.7%)
Dysplasia of hip	30 (11.1%)
Rheumatoid arthritis	12 (4.4%)

Table 1: Demographic factors of the patients.

Parameter	Total (min-max)	Osteonecrosis femoral head	of primary osteoarthritis hip	secondary osteoarthritis hip	dysplasia of hip	Rheumatoid arthritis
Age of hip pain beginning	42.6 (9-65)	41.5 (18-56)	45.6 (20-65)	36.0 (9-60)	33.3 (9-52)	43.7 (33-52)
Age of sexual difficulties beginning	45 (21-63)	42.2 (21-58)	49.4 (28-65)	45.3 (30-61)	33.3 (24-52)	39.5 (36-43)
Time for intercourse resumption postarthroplasty	66.4 (4-365)	61.8 (5-210)	69.9 (8-365)	62.4 (4-180)	75.5 (21-120)	45.7 (35-60)

Table 2: Mean age (range) related to hip pain/sexual difficulties beginning (year) and time for intercourse resumption postarthroplasty (day).

After THR, the frequency of sexual activity increased in 18.5% of patients specially women ($p=0.02$), decreased in 11.5% of patients and did not change in 70% of patients. Only women with little or no sexual difficulties had a significantly lower functional score of Womac than those with moderate sexual difficulties ($p=0.002$).

Variable	No. of patients (%)
Hip/back pain	101 (37.4%)
Range of motion limitation	98 (36.3%)
Loss of libido	21 (7.7%)
Lack of understanding from the spouse	9 (3.3%)
None	41 (15.3%)

Table 3: Reasons for preoperative sexual difficulties.

Men used the same coital position before and after THR, but women's coital position was different before and after THR. They preferred coital position that did not require abduction and external rotation of hip before THR. Only 17.3% of patients were able to obtain information on sexual activity before and/or after THR, and only 10.5% were aware of the time needed for resumption. In most cases, this information was taken from internet, followed by medical staff: physiotherapist and physiatrist in charge of rehabilitation.

Patients felt that it was the surgeon, followed by the physiatrist and then the physiotherapist, who were best placed to deliver this type of information. About 223 patients who did not ask a physician for information, 201 patients (90.2%) responded that the topic was too personal to discuss, and 22 patients (9.8%) cited an unsuitable environment in outpatient clinics.

The question that most patients wanted answered concerned the safety of coital positions and the second most common question concerned the time of resumption.

Variable	Male	Female	p-value
Number	154	116	
Sexual difficulties behind patient's decision to undergo THR			0.33
Yes	18	24	
No	106	78	
Preoperative sexual difficulties			0.004
None	62	16	
Slight	36	22	
Moderate	38	44	
Severe	16	28	
Major	2	6	
Reasons for sexual difficulties			0
Hip/back pain	49	62	
Range of motion limitation	32	66	
Loss of libido	8	13	
Lack of understanding from the spouse	7	1	
Postoperative sexual difficulties			0.13
None	58	36	
Slight	22	16	
Moderate	16	30	
Severe	0	0	
Major	0	2	
Sexual intercourse frequency after total hip replacement			0.02
Stationary	122	60	
Increased	16	32	
decreased	16	14	
Time course for the resumption of intercourse postarthroplasty	53.9 (5-210)	87.2 (4-365)	0.0005
*The total is less than 270 due to non-response			

Table 4: Gender effect in sexual difficulties reasons and total hip replacement's result.

Discussion

This article has some limitations which are inherent in this type of study. First, the retrospective nature of this study means it is limited by the patient recall. Second, personal face-to-face interviews may distort information, especially when the questions address sensitive issues [16,17]. The anonymous character allows patients to express more freely on a private subject [4,10]. The impact of sexual difficulties on quality of life, tension or dissatisfaction in relationship with the partner

is more easily expressed anonymously. Several studies showed that more than half of the patients suffer from sexual difficulties directly related to chronic hip pain [10,11], and in 5 to 10% patients, it caused sexual intercourse's cessation [9-11]. The main causes are pain, apprehension of pain, asthenia and joint stiffness [9,18]. Other factors may be involved [11,18,19]: decreased libido, involvement of other joints, such as those of the rachis [20], which is observed early in chronic inflammatory rheumatism in young subjects [21]. Women are affected more often than men by these sexual difficulties, in term of frequency, intensity and age of illness [9-11]. In these cases, THR usually ameliorates these symptoms [9,21]. Stern et al. [9] demonstrate that frequency of sexual intercourse after THR increase so it proves beneficial effects of surgery on patients' sexuality. Our study confirms these results, but frequency increases only in less than 20% of our patients.

In our study, the median time to resumption of sexual activity was more than three months. Men seemed to resume their sexual activities earlier than women because they need less joint mobility. We also found that men used the same coital positions before and after THR. However, in women the coital positions are very different between the preoperative period, where the chosen positions require a low joint mobility, and the period after surgery where positions with abduction and external rotation in supine position are preferred. The most common fear during sexual activity was dislocation. The issue of greatest concern was the fear of dislocation during sexual activity. These coital positions can be used early without risk. It is necessary to respect a period of one month to allow the healing of periarticular tissues (especially posterior stabilizing elements), skin and subcutaneous tissue. Sexual intercourse can be safely resumed after a postoperative period of one to two months [9] for the supine position and after three months whatever the position except extreme coital position.

There is a lack of information about sexual difficulties induced by chronic hip diseases [7,9-11,13,15]. Dahm et al. [15] emphasize that 80% of physicians rarely, if never, talk about sexuality after THR with their patients. More than three-quarters of patients would like information about sexual intercourse after THR to be delivered, and two-thirds feel that a dialogue with the surgeon would help them [11]. In our study, most patients were unable to obtain information, and did not ask for due to the personal nature of the topic. The internet was the most common source of information among those who managed to obtain information on sexual activity. However, studies on the quality of medical information provided by internet show that it is often misleading and of poor quality, which means that patients may be provided with incorrect information [22-25].

In the early postoperative period, the role of the surgeon, the physiotherapist and then the rehabilitation doctor must be to reassure patients of their possibilities while providing them with clear and detailed information to limit the risk of dislocation during activities of everyday life as well as during sexual activities. The information must relate to the period of resumption of sexual activities and permissible coital positions without risk of complication.

Conclusion

Sexual difficulties should not be marginalized, but they should be assessed before and after surgery. It is the role of a multidisciplinary team: surgeon, physiatrist and physiotherapist to provide clear information.

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Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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