

# Return to Sexual Function After Total Hip Arthroplasty

*A Multicenter Survey Study*

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# Background

**It has been previously reported that hip pain limits sexual activity preoperatively, however sexual outcomes after THA remain poorly characterized.**

**Prior kinematic analyses have identified specific sexual positions that may pose increased risk of prosthetic impingement or instability after THA.**

**Recommendations for safe positions and timelines for resumption of sexual activity are scarce and inconsistent.**

*Restoring sexual function is a high-priority outcome for patients undergoing THA. Surgeons rarely address this topic proactively.*

# Purpose

**01** Evaluate return to sexual function after primary THA

**02** Assess timing, preferred coital positions, and satisfaction changes

**03** Identify demographic predictors of return to sexual activity

**04** Inform surgeon counseling and patient-centered care

# Study Design & Analysis

## STUDY DESIGN

- Anonymous electronic survey designed and reported in accordance with STROBE guidelines for observational research.
- Primary THA for osteoarthritis patients at two academic institutions 2019 – 2024 were surveyed.
- 1,311 eligible patients, 590 agreed to participate, 416 completed responses (32% response rate).
- Preferred sexual positions were evaluated using the American Association of Hip and Knee Surgeons (AAHKS) diagram.

## STATISTICAL ANALYSIS

### Time to Event

Kaplan-Meier survival analysis

### Predictors

Multivariable Cox proportional hazards model

### Satisfaction

Wilcoxon signed-rank test (paired pre/post)

### Outcomes

Return to sex, satisfaction, and position analysis.

**Table 1. Demographic Characteristics (N = 416)**

Variable	Category	n (%)
Sex	Male	196 (47.1)
	Female	218 (52.4)
	Other	2 (0.5)
Age Range (years)	≤39	15 (3.6)
	40–49	21 (5.0)
	50–59	73 (17.5)
	60–69	168 (40.3)
	70–79	124 (29.7)
	80–89	16 (3.8)
	≥90	0 (0)
Race/Ethnicity	White	389 (94.4)
	Black	14 (3.4)
	Hispanic/Latino	5 (1.2)
	Asian	1 (0.2)
	American Indian/Alaskan Native	1 (0.2)
	Native Hawaiian/Pacific Islander	2 (0.5)
Relationship Status	Single	63 (15.1)
	Married	269 (64.4)
	Divorced	27 (6.5)
	In a relationship	43 (10.3)
	Other	16 (3.8)
Duration of Relationship	<1 year	7 (1.7)
	1–5 years	20 (4.9)
	5–10 years	23 (5.6)
	>10 years	279 (67.7)
	Not applicable	83 (20.1)

# Patient Demographics

52%

Female

47%

Male

64%

Married

67%

Relationship  
>10 Years

## AGE DISTRIBUTION

40% respondents aged 60–69 years, 30% of respondents were aged 70–79 years

# Return to Sexual Activity After THA

Median Return

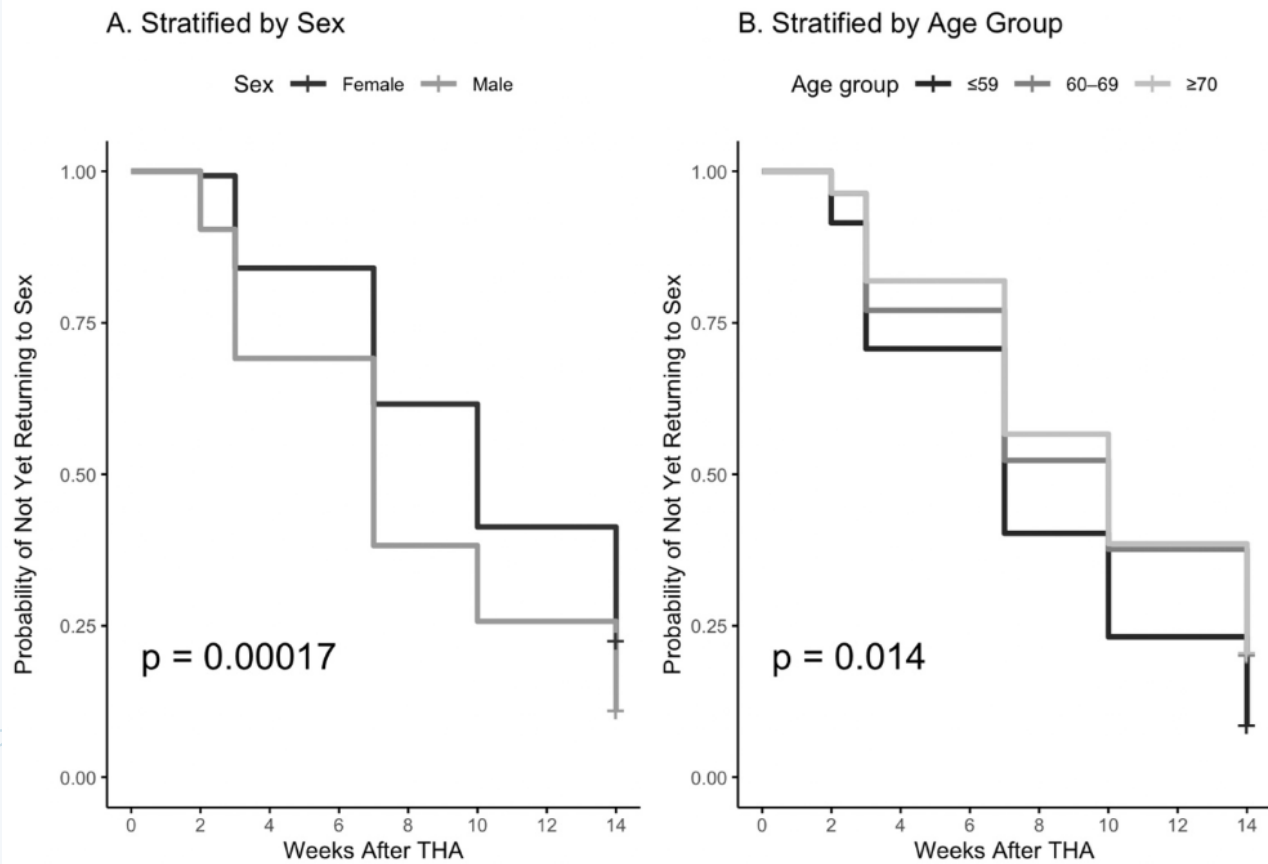
10

weeks

*post-operatively*

339 Table 2. Distribution of Time to Return to Sexual Activity After THA

Time to Return	Overall (n=274)	Male (n=136)	Female (n=138)	Age ≤59 (n=82)	Age 60–69 (n=109) / ≥70 (n=83)
≤ 2 weeks	24 (8.8%)	14 (10.3%)	10 (7.2%)	9 (11.0%)	15 (7.8%)
2–4 weeks	51 (18.6%)	29 (21.3%)	22 (15.9%)	22 (26.8%)	29 (15.1%)
6–8 weeks	82 (29.9%)	39 (28.7%)	43 (31.2%)	28 (34.1%)	54 (28.1%)
8–12 weeks	45 (16.4%)	23 (16.9%)	22 (15.9%)	11 (13.4%)	34 (17.7%)
> 12 weeks	26 (9.5%)	13 (9.6%)	13 (9.4%)	6 (7.3%)	20 (10.4%)
Have not resumed	46 (16.8%)	18 (13.2%)	28 (20.3%)	6 (7.3%)	40 (20.8%)



**Figure 2. Kaplan–Meier curves demonstrating time to return to sexual activity following total hip arthroplasty, stratified by (A) sex and (B) age group.** Patients who had not resumed sexual activity at the time of survey completion were treated as right-censored. Differences between groups were assessed using the log-rank test.

# Predictors of Earlier Return to Sexual Activity

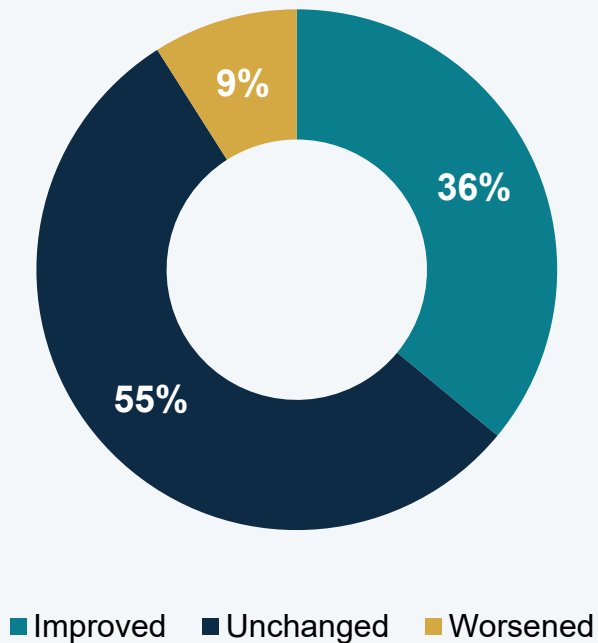
*Cox Proportional Hazards Model*

Predictor	Hazard Ratio	95% CI	p-value	Direction
Male Sex	<b>1.59</b>	1.23 – 2.07	<b>&lt; 0.001</b>	Earlier Return ↑
Age 60–69 years	<b>0.70</b>	0.51 – 0.95	<b>0.02</b>	Delayed Return ↓
Age ≥70 years	<b>0.65</b>	0.47 – 0.91	<b>0.01</b>	Delayed Return ↓

*Reference group: Female sex, Age <60 years. HR >1 indicates earlier return; HR <1 indicates delayed return.*

Younger patient age and male sex were the strongest independent predictors of earlier return to sexual activity.

# Sexual Satisfaction After THA



**36%**

Reported improved sexual satisfaction

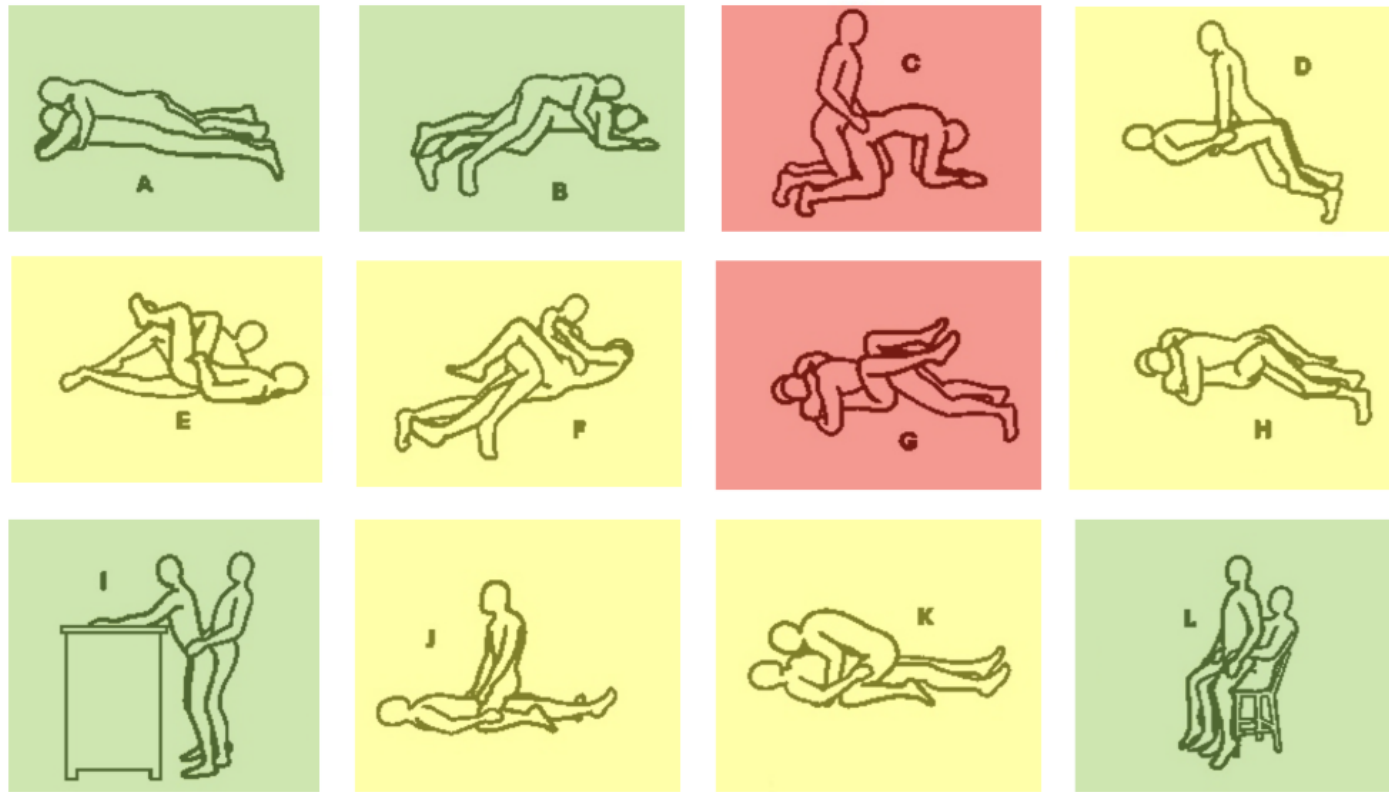
**55%**

Reported unchanged satisfaction

**9%**

Reported worsened satisfaction

Overall improvement:  $p < 0.001$  (Wilcoxon signed-rank)



**Figure 3. Sexual positions self-reported as most painful** Colored tiles indicate frequency of pain reported for each position. Green = low frequency (< 25 responses), yellow = moderate frequency (25-39 responses), red = highest frequency (≥ 40 responses). Patients were allowed to select multiple positions.

# Conclusions

- 01** THA significantly improves sexual satisfaction, with most patients (91%) maintaining or improving satisfaction scores ( $p < 0.001$ ).
- 02** The median return to sexual activity is 10 weeks.
- 03** Male sex (HR 1.59,  $p < 0.001$ ) predicts earlier return; older age ( $\geq 70$ ) predicts delayed return.
- 04** 75% of patients desire surgical guidance on return to sexual activity

# Limitations

1

## Survey & Recall Bias

Patient-reported outcomes subject to self-selection and recall bias. Response rate of 32% may introduce non-response bias.

2

## Regional Cohort

Data collected from two academic institutions; generalizability to other practice settings may be limited.

3

## Predominantly Anterior Approach

Approach-specific outcomes could not be fully stratified; results may not apply equally to other surgical approaches.

4

## Missing Clinical Variables

Implant specifications, rehabilitation protocols.

**Thank you!**

