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Primary Hip

Does THA Affect Sexual Dysfunction in Female Patients With DDH?

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ABSTRACT

Background: Sexual health, aside from reproduction, plays an important role in physical, intellectual, emotional and social facets of life. Developmental dysplasia of the hip (DDH) is a chronic orthopedic disease that has negative physical, social, and mental/spiritual effects, and lowers quality of life. However, no studies exist in the literature that focus on sexual function and health in patients with DDH.
Methods: The preoperative and postoperative 6th month and 1st year sexual functions of women who underwent surgical treatment (total hip arthroplasty) for DDH (Crowe 1–4) (n:50) and their spouses (n:30) were evaluated with Arizona Sexual Experience scale (ASEX) questionnaire which evaluates sexual function in 5 categories such as desire, arousal, erection/lubrication, orgasm, and satisfaction.
Results: The ASEX scores were 22.3 ± 3.5 preoperatively, 17.8 ± 2 at the 6th postoperative month, and 14.8 ± 1.3 at the 1st postoperative year. The decrease in the average score showed that sexual dysfunction existed in the preoperative period and sexual function was positively affected in the postoperative period over time. The ASEX scores of the patients younger than 35 in the postoperative 6th month had higher scores ($P = .29$). The sexual life of the husbands was not affected by the wives' surgery, even though their spouses had a chronic condition causing functional difficulties.
Conclusion: This study showed that the sexual life of women with DDH, who had been treated with total hip arthroplasty, was positively affected, whereas their husbands were unaffected. Further studies focusing on the effect of physiological and emotional factors, in addition to the surgical treatment, on sexual function are needed.

Developmental dysplasia of the hip (DDH) is the main cause of total hip replacement in young people (about 21% to 29%) [1]. The patients are mostly women who suffer from early onset arthritis and chronic pain in adulthood. Orthopedic surgeons, in clinical practice, approach these patients from a physiological and functional viewpoint of total hip arthroplasty (THA), and thus psychological effects are usually neglected. The literature has focused on depression and mental health which are associated with chronic pain and loss of function in patients undergoing THA for the treatment of primary OA [2]. On the other hand, the studies of patients undergoing THA due to DDH have mainly evaluated surgical technique and the effect of surgery on pain and functionality in patients [3–5].

According to the World Health Organization, health is not defined as the absence of illness or disability, but as a state of physical, spiritual, and social well-being [6]. According to this definition, sexual function is directly related to health. However, health care providers usually fail to evaluate sexual functionality because of a lack of time, knowledge and education, or difficulty in speaking about sexual problems [7–9]. The Arizona Sexual Experience scale (ASEX) is a questionnaire that evaluates sexual function in 5 categories (sexual arousal, erection/lubrication, satisfaction with orgasm, sexual drive, and sexual satisfaction), and it was chosen because it is easy to use and has been validated for the Turkish language [10,11].

It is not easy for orthopedic surgeons to focus on sexual function who prioritize the surgical management of the patients with a DDH diagnosis undergoing THA. For this reason, ASEX was chosen for the evaluation of the sexual function. The primary endpoint of this study was to investigate sexual function in women undergoing THA and their spouses in the preoperative and postoperative period to determine the effect of surgery on sexual function by comparing the subcategories of sexual function.

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Materials and Methods

The study included 150 patients prospectively who underwent THA for Crowe 1–4 DDH between June 2013 and March 2017.

THAs were performed by 2 different orthopedic surgeons. Arthroplasties were performed by direct lateral approach in combination with a subtrochanteric transverse shortening osteotomy and Zweymüller femoral stem without any fixation instruments for the osteotomy. The cementless acetabular component was placed at the level of the anatomic hip center.

Patients who needed revision surgeries and suffered from complications such as periprosthetic infections, dislocations, or wound infections were excluded from the study in the first-year follow-up. Diagram shows the distribution of the patients who were included and excluded and their characteristics (Fig. 1).

The ASEX questionnaire was given to the patients using printed material 1 week before the surgery, and on the 6th postoperative month and 1st postoperative year. The authors observed the participants while answering the questionnaire. Husbands who consented to be included in the study were given the printed questionnaire preoperatively and at the 1st postoperative year because the subject is considered very private and difficult in our country.

The questionnaires were handed out to the patients and their spouses during the clinic visit. Demographic data such as age, gender, and clinical data such as concomitant diseases and drug use were collected from their medical records. The spouses were questioned before inclusion and unsuitable spouses were excluded from the study.

The ASEX was developed by McGahuey et al. in 2000 [10]. The reliability and validity study of the Turkish version was conducted by Soykan et al. in 2004 [11]. The form consists of 5 categories and 5 articles and is used to evaluate 5 components of sexual function. These components are desire, arousal, erection/lubrication, orgasm, and satisfaction. The advantage of this questionnaire is that it is simple to administer and easy to score. It can be completed by the subject on his or her own, or the questions can be asked by the clinician. The 5 questions are scored from 1 to 6 and the total score varies between 5 and 30. Sexual dysfunction is defined as a score of 19 or more, higher than 5 on any item, or higher than 4 on 3 items. The questionnaire used in this study was self-reported, with explanations given where the patients had difficulties. Questionnaires were manually scored by the authors.

Local ethics committee approval was obtained for this study. All patients and their spouses signed a written informed consent form before participating in the study. The Declaration of Helsinki was adhered to and good clinical practice guidelines were followed throughout the study.

Statistical Analysis

Data analyses were performed using SPSS for Windows, version 22.0 (IBM Corp., Armonk, NY). Whether the distribution of continuous variables was normal or not was determined using the Kolmogorov Smirnov test. The Levene test was used for the evaluation of homogeneity of the variables. Categorical variables were expressed as either frequency or percentage. Instances of 2

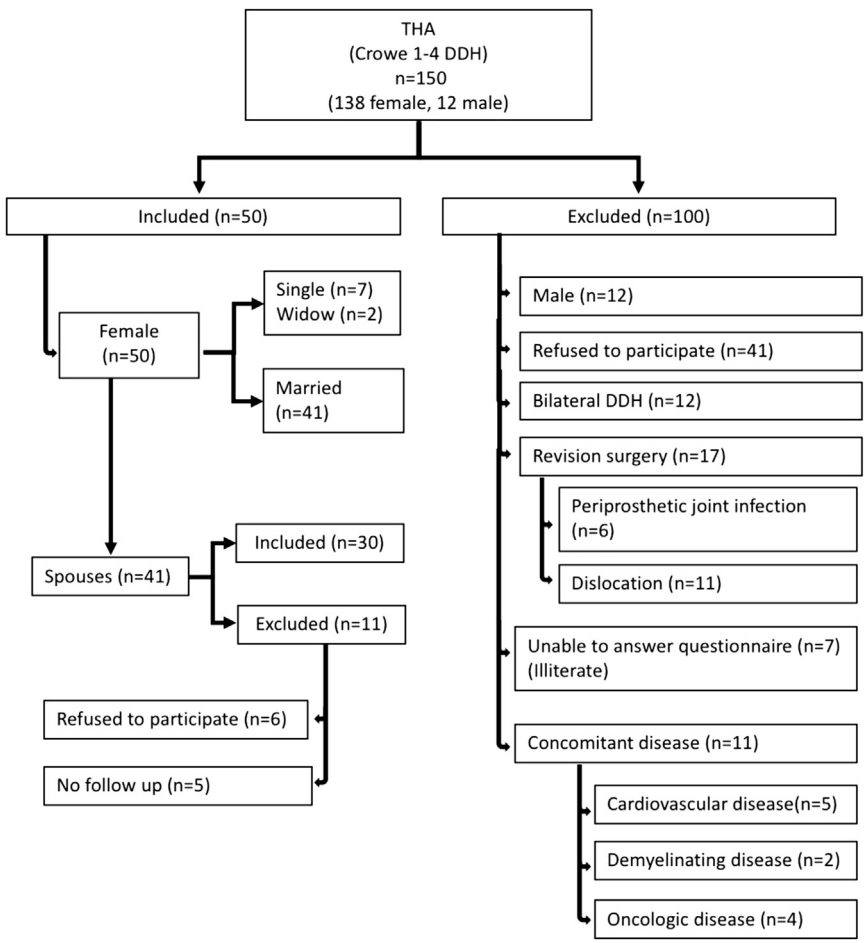

Fig. 1. A consort diagram of the study population.

categorical dependent variables were compared using the McNemar test, whereas those with 3 categorical dependent variables were compared using the Cochran Q test. Bonferroni correction was performed for the binary comparisons among the groups. Continuous variables were expressed as either the mean ± standard deviation (SD), median, or range. Instances of 2 continuous dependent variables were compared using the Wilcoxon test, whereas those with 3 continuous dependent variables were compared using the Friedman test. Bonferroni corrections were performed for the binary comparisons among the groups. Instances of 2 continuous independent variables were compared using the Mann-Whitney U test. Degrees of relation between variables were evaluated using the Spearmen correlation analysis. $P < .05$ was accepted as statistically significant for all of the analyses.

Results

Fifty women between 20 and 50 years of age (average of 34.4 ± 4.2 years) and 30 husbands (average of 42.3 ± 3.7 years) were included in the study. Thirty-two of the patients were classified as

Table 1
Numerical Distribution of ASEX Responses at the Preoperative Period, Postoperative 6th Month and 1st Year of Patients Who Underwent THA Secondary to DDH.

Questions Asked to Patients		Preoperatively		Postoperative 6th Month		Postoperative 1st Year	
		n	%	n	%	n	%
1. How strong is your sex drive?	Extremely strong	-		-		-	
	Very strong	9	(18.0%)	6	(12.0%)	23	(46.0%)
	Somewhat strong	6	(12.0%)	20	(40.0%)	23	(46.0%)
	Somewhat weak	22	(44.0%)	24	(48.0%)	3	(6.0%)
	Very weak	13	(26.0%)	-		1	(2.0%)
	No sex drive	-		-		-	
2. How easily are you sexually aroused (turned on)?	Extremely easily	-		-		-	
	Very easily	1	(2.0%)	2	(4.0%)	-	
	Somewhat easily	11	(22.0%)	36	(72.0%)	4	(8.0%)
	Somewhat difficult	12	(24.0%)	11	(22.0%)	42	(84.0%)
	Very difficult	26	(52.0%)	1	(2.0%)	3	(6.0%)
	Never aroused	-		-		1	(2.0%)
3. How easily does your vagina become moist or wet during sex?	Extremely easily	-		-		1	(2.0%)
	Very easily	1	(2.0%)	3	(6.0%)	32	(64.0%)
	Somewhat easily	14	(28.0%)	15	(30.0%)	17	(34.0%)
	Somewhat difficult	20	(40.0%)	27	(54.0%)	-	
	Very difficult	14	(28.0%)	2	(4.0%)	-	
	Never	1	(2.0%)	36	(72.0%)	-	
4. How easily can you reach an orgasm?	Extremely easily	-		-		-	
	Very easily	-		9	(18.0%)	8	(16.0%)
	Somewhat easily	-		39	(78.0%)	42	(84.0%)
	Somewhat difficult	9	(18.0%)	2	(4.0%)	-	
	Very difficult	27	(54.0%)	-		-	
	Never reach orgasm	14	(28.0%)	-		-	
5. Are your orgasms satisfying?	Extremely satisfying	1	(2.0%)	-		-	
	Very satisfying	-		-		10	(20.0%)
	Somewhat satisfying	-		9	(18.0%)	32	(64.0%)
	Somewhat unsatisfying	9	(18.0%)	41	(82.0%)	8	(16.0%)
	Very unsatisfying	20	(40.0%)	-		-	
	Cannot reach orgasm	20	(40.0%)	-		-	

ASEX, Arizona Sexual Experience scale; DDH, developmental dysplasia of the hip; THA, total hip arthroplasty.

Table 2
Numerical Distribution of ASEX Responses at the Preoperative Period and 1st Year of Husbands Whose Wives Underwent THA Secondary to DDH.

Questions Asked to Patients		Preoperatively		Postoperative 1st Year	
		n	%	n	%
1. How strong is your sex drive?	Extremely strong	7	(23.3%)	7	(23.3%)
	Very strong	19	(63.3%)	23	(76.7%)
	Somewhat strong	2	(6.7%)	-	
	Somewhat weak	2	(6.7%)	-	
	Very weak	-		-	
	No sex drive	-		-	
2. How easily are you sexually aroused (turned on)?	Extremely easily	6	(20.0%)	5	(16.7%)
	Very easily	20	(66.7%)	25	(83.3%)
	Somewhat easily	4	(13.3%)	-	
	Somewhat difficult	-		-	
	Very difficult	-		-	
	Never aroused	-		-	
3. Can you easily get and keep an erection?	Extremely easily	6	(20.0%)	5	(16.7%)
	Very easily	24	(80.0%)	25	(83.3%)
	Somewhat easily	-		-	
	Somewhat difficult	-		-	
	Very difficult	-		-	
	Never	-		-	
4. How easily can you reach an orgasm?	Extremely easily	2	(6.7%)	1	(3.3%)
	Very easily	16	(53.3%)	18	(60.0%)
	Somewhat easily	10	(33.3%)	9	(30.0%)
	Somewhat difficult	1	(3.3%)	1	(3.3%)
	Very difficult	1	(3.3%)	1	(3.3%)
	Never reach orgasm	-		-	
5. Are your orgasms satisfying?	Extremely satisfying	9	(30.0%)	10	(33.3%)
	Very satisfying	21	(70.0%)	20	(66.7%)
	Somewhat satisfying	-		-	
	Somewhat unsatisfying	-		-	
	Very unsatisfying	-		-	
	Cannot reach orgasm	-		-	

ASEX, Arizona Sexual Experience scale; DDH, developmental dysplasia of the hip; THA, total hip arthroplasty.

Crowe 1-2 (low grade dysplasia) whereas 18 were classified as Crowe 3-4 (higher grade dysplasia). None of the patients included in the study underwent bilateral THA. Of the remaining 20 women, 9 were single. Of the husbands, 6 refused to participate in the study and the remaining 5 did not come to the clinic for the second application of the questionnaire.

Table 1 summarizes the answers of the female patients to the preoperative, postoperative 6th month, and 1st year questionnaires, whereas Table 2 summarizes the answer of their spouses to the preoperative and 1st year questionnaires. The numerical distributions given in these 2 tables consist of 3 dependent variables (preoperative, postoperative 6th month and 1st year) and the categorical variables (5 questions) we aimed to compare. These data which did not conform to statistical analysis were reduced to 2 categories in Tables 3 and 4 as strong (first 3 answers as extremely strong, very strong and somewhat strong) and weak (last 3 answers as somewhat weak, very weak and no sex drive). Thus, Tables 3 and 4 summarize the answers to the first 3 and last 3 questions of patients and their husbands.

A statistically significant positive increase was detected in the patients in all 5 categories (Table 3). The change in husbands' responses was analyzed in Table 4 and no significant difference was detected between the preoperative and postoperative time points in the 5 subcategories. Tables 3 and 4 also show the average, SD, median, and range of the total scores. Figure 2 shows the distribution of the preoperative, postoperative 6th month, and 1st year changes of the patients.

It can be seen that the ASEX score decreased at the postoperative 6th month when compared with the preoperative period and it decreased even further at the postoperative 1st year. This means that, according to the total ASEX scores, patients experienced better sexual function over time after surgery (Table 3). While husbands had lower scores when compared with the preoperative period, this was not statistically significant ($P > .05$).

Table 3
Numerical Distribution and Average Scores for Responses to the ASEX Questionnaire Given by Patients Who Underwent THA due to DDH at the Preoperative Period, Postoperative 6th Month and the 1st Year.

Items		Preoperatively	Postoperative 6th Month	Postoperative 1st Year	*P*-Value
		n (%)	n (%)	n (%)	
Sexual drive	Strong	15 (30.0%)	26 (52.0%)	46 (92.0%)	**<.001**[b,c]
	Weak	35 (70.0%)	24 (48.0%)	-	
Sexual arousal	Easily	12 (24.0%)	26 (52.0%)	48 (96.0%)	**<.001**[a,b,c]
	Difficult	38 (76.0%)	24 (48.0%)	2 (4.0%)	
Vaginal lubrication	Easily	15 (30.0%)	38 (76.0%)	50 (100.0%)	**<.001**[a,b,c]
	Difficult	35 (70.0%)	12 (24.0%)	-	
Orgasm	Easily	-	4 (8.0%)	9 (18.0%)	**.004**[b]
	Difficult	50 (100.0%)	46 (92.0%)	41 (82.0%)	
Satisfaction with orgasm	Satisfying	1 (2.0%)	18 (36.0%)	42 (84.0%)	**<.001**[a,b,c]
	Unsatisfying	49 (98.0%)	32 (64.0%)	8 (16.0%)	
		Mean + SD	Mean + SD	Mean + SD	
Total ASEX score		22.28 ± 3.55	17.78 ± 2.07	14.80 ± 1.29	**<.001**[a,b,c]

ASEX, Arizona Sexual Experience scale; DDH, developmental dysplasia of the hip; THA, total hip arthroplasty.
Statistically significant *P*-values are in bold.
Significant differences were found between
[a] preoperative vs postoperative 6th month;
[b] preoperative vs postoperative 1st year;
[c] postoperative 6th month vs postoperative 1st year.

As a result, when the patients were evaluated concerning desire, data show that desire increased to 52% at the postoperative 6th month and to 92% at the 1st postoperative year from preoperative 30%. Binary comparison showed no statistically significant increase between the preoperative period and the postoperative 6th month, whereas there was a significant increase at the 1st year compared with both preoperative period and 6th postoperative month. When the husbands were evaluated concerning desire, 93% reported as strong in the perioperative period whereas all husbands reported as strong at the 1st postoperative year. The second question of ASEX concerns arousal and 76% patients reported difficulties, whereas this number dropped to 48% at the 6th postoperative month and to 4% at the 1st postoperative year. Husbands reported easy arousal both preoperatively and at the 1st postoperative year.

The third question concerns vaginal lubrication in women and penile erection in men. Husbands reported nonproblematic penile erection in both preoperative and postoperative periods and patients reported nonproblematic vaginal lubrication at the postoperative 1st year. Orgasm was evaluated by the fourth question in both men and women. There was no change in husbands, whereas all patients reported difficult orgasm in the preoperative period which dropped to 82% at the 1st preoperative year. The fifth question evaluates satisfaction with orgasm which was unsatisfying for 98% of the patients in the preoperative period and dropped to 16% at the 1st postoperative year.

ASEX results of husbands and patients which are grouped as Crowe 1-2 and 3-4 are summarized in Tables 5 and 6. There was no statistically significant difference between 32 Crowe 1-2 patients and 18 Crowe 3-4 patients when they were compared for subcategories in the preoperative period, postoperative 6th month and 1st year. However, Crowe 1-2 patients had a significantly higher total ASEX score at the 1st postoperative year ($P = .024$). The husbands were not affected by the Crowe classification (1-2 or 3-4) of their wives, and as such, there was no difference between the ASEX score of husbands of either group (Table 6).

Table 7 displays whether there is a correlation between age and the ASEX scores at the 3 time points of the patients. According to the results, the only statistically significant result, although weak, existed between the women's age and the postoperative 6th month

Table 4
Numerical Distribution and Average Scores for Responses to the ASEX Questionnaire Given by the Husbands Whose Wives Underwent THA due to DDH at the Preoperative Period and the 1st Postoperative Year.

Items		Preoperatively	Postoperative 1st Year	*P*-Value
		n (%)	n (%)	
Sexual drive	Strong	28 (93.3%)	30 (100.0%)	0.500
	Weak	2 (6.7%)	-	
Sexual arousal	Easily	30 (100.0%)	30 (100.0%)	-
	Difficult	-	-	
Penile erection	Easily	30 (100.0%)	30 (100.0%)	-
	Difficult	-	-	
Orgasm	Easily	28 (93.3%)	28 (93.3%)	1.000
	Difficult	2 (6.7%)	2 (6.7%)	
Satisfaction with orgasm	Satisfying	30 (100.0%)	30 (100.0%)	-
	Unsatisfying	-	-	
		Mean ± SD	Mean ± SD	
Total ASEX score		9.83 ± 1.86	9.53 ± 1.33	0.391

ASEX, Arizona Sexual Experience scale; DDH, developmental dysplasia of the hip; THA, total hip arthroplasty.

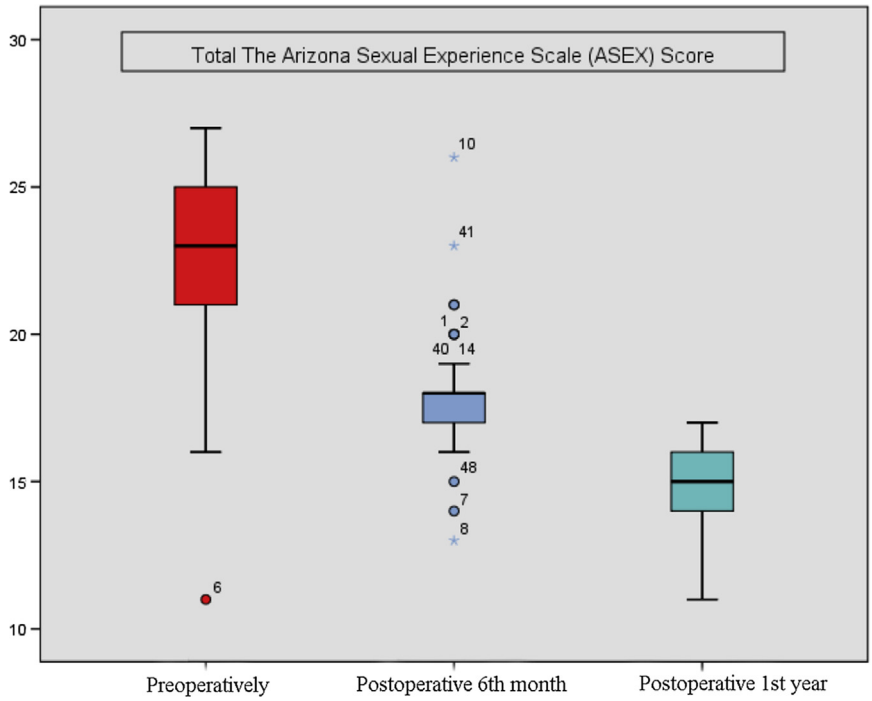

Fig. 2. Total patient ASEX scores at 3 different time points. ASEX, Arizona Sexual Experience scale.

Table 5
Comparison of ASEX Subgroup Scores of Crowe 1-2 and Crowe 3-4 Patients at the Preoperative Period, Postoperative 6th Month and 1st Year.

Items			Crowe 1-2 (n:32)		Crowe 3-4 (n:18)		*P* Value
			n	%	n	%	
Preoperatively	Sexual drive	Strong	9	28.1%	6	33.3%	.700
		Weak	23	71.9%	12	66.7%	
	Sexual arousal	Strong	6	18.8%	6	33.3%	.309
		Weak	26	81.3%	12	66.7%	
	Vaginal lubrication	Strong	9	28.1%	6	33.3%	.700
		Weak	23	71.9%	12	66.7%	
	Orgasm	Strong	-		-		-
		Weak	32	100.0%	18	100.0%	
	Satisfaction with orgasm	Strong	-		1	5.6%	.360
		Weak	32	100.0%	17	94.4%	
Postoperative 6th month	Sexual drive	Strong	16	50.0%	10	55.6%	.706
		Weak	16	50.0%	8	44.4%	
	Sexual arousal	Strong	17	53.1%	9	50.0%	.832
		Weak	15	46.9%	9	50.0%	
	Vaginal lubrication	Strong	24	75.0%	14	77.8%	.825
		Weak	8	25.0%	4	22.2%	
	Orgasm	Strong	3	9.4%	1	5.6%	.633
		Weak	29	90.6%	17	94.4%	
	Satisfaction with orgasm	Strong	10	31.3%	8	44.4%	.351
		Weak	22	68.8%	10	55.6%	
Postoperative 1st year	Sexual drive	Strong	32	100.0%	18	100.0%	-
		Weak	-		-		
	Sexual arousal	Strong	30	93.8%	18	100.0%	.530
		Weak	2	6.3%	-		
	Vaginal lubrication	Strong	32	100.0%	18	100.0%	-
		Weak	-		-		
	Orgasm	Strong	3	9.4%	6	33.3%	.055
		Weak	29	90.6%	12	66.7%	
	Satisfaction with orgasm	Strong	27	84.4%	15	83.3%	1000
		Weak	5	15.6%	3	16.7%	

ASEX, Arizona Sexual Experience scale.

Table 6
Average ASEX Scores and Comparisons of the Husbands and Their Wives in the Preoperative Period, Postoperative 6th Month and 1st Year.

Total ASEX Score	Crowe		*P*
	Crowe 1-2 (n:32)	Crowe 3-4 (n:18)	
	Mean ± SD	Mean ± SD	
Female			
Preoperatively	22.62 ± 3.05	21.67 ± 4.33	.523
Postoperative 6th month	17.72 ± 1.69	17.89 ± 2.68	.660
Postoperative 12th month	15.12 ± 1.18	14.22 ± 1.31	.024
Male			
Preoperatively	5.97 ± 5.23	5.78 ± 4.93	.815
Postoperative 12th month	5.59 ± 4.84	5.94 ± 4.94	.787

ASEX, Arizona Sexual Experience scale.

ASEX score (r = + 0.309). This means that younger women had better sexual function at the postoperative 6th month. Although the r value was always positive and the ASEX scores decreased as the age decreased, there was no statistically significant correlation. Older husbands had lower ASEX scores (.05 < *P* < .10; borderline significance). Although younger participants (younger than 35 years old) had lower ASEX scores, this was not statistically significant. The statistically significant relationship between age and postoperative 6th month ASEX scores is given in Figure 3. The relationship between ASEX scores and women younger or older than 35 is given in Table 8. Women younger than 35 had lower ASEX scores at the postoperative 6th month when compared with women older than 35; hence, they had better sexual function in the postoperative period.

Discussion

Although there are numerous studies concerning the effect of THA on quality of life, chronic pain, and physical function in the literature, the number of studies focusing the effect on sexual function is minimal [12–20]. As expected, full functionality and the absence of pain is important for sexual function [21]. A positive improvement in all 5 subareas of the sexual function was observed in women who underwent THA secondary to DDH, based on the ASEX questionnaire; however, the same improvement was not observed in their husbands in our study. No study could be found in the literature concerning the effect of surgical treatment, THA, on women with DDH, which is a homogenous population. The limited number of studies which investigated sexual functions in patients who underwent THA for various reasons was evaluated. Valenzuela et al. used a questionnaire in their study and reported postoperative improvement in sex life in 25%–40% of 18 women who underwent periacetabular osteotomy [21]. Klit et al. showed long-term positive improvements in both sexes after periacetabular osteotomy [22]. As a result of a database search performed by Issa et al. [20], 10 studies conducted between 1970 and 2015 were evaluated and a 45% increase in sexual satisfaction, as a result of THA, was reported.

The ASEX scores of the patients preoperatively, and in the postoperative 6th month and 1st year, pointed to a preoperative sexual dysfunction and an improvement in the postoperative period over time. With regard to the subcategories, a statistically significant improvement in sexual arousal, vaginal lubrication, and satisfaction was observed when the postoperative 6th month and 1st year were compared with the preoperative period. There was a statistically significant improvement in sexual drive when the preoperative period and postoperative 6th month were compared, and when the postoperative 6th month and postoperative 1st year were compared. Although there was an improvement in the orgasm subcategory, the only statistically significant improvement was between the preoperative period and the postoperative 1st year. These findings suggested a positive effect of surgery over time. Age is one of the fundamental factors effecting sexual function. It was found that younger patients (younger than 35) had better ASEX scores at the postoperative 6th month.

The ASEX questionnaire was given to the husbands of the patients preoperatively and at the postoperative 1st year to evaluate the effect of surgery on spouse sexual functionality. The reason it was applied only twice for the spouses was the difficulty and privacy of the subject in Turkey. The average ASEX scores of the husbands for the preoperative period and the 1st postoperative year, although an increase in postoperative sexual drive and orgasm was observed, was not statistically significant. Although their wives had a chronic condition and a functional difficulty, the sexual function

Table 7
The Change in ASEX Scores in the Preoperative Period, at the Postoperative 6th Month and 1st Year for Patients Younger or Older Than 35 Years.

	Total ASEX Score				*P*-Value
	Mean	SD	Median	Range	
Preoperatively					
Age <35 (n: 28)	22.07	3.47	23.0	9.0	.524
Age ≥35 (n: 22)	22.55	3.70	23.5	16.0	
Postoperative 6th month					
Age <35 (n: 28)	17.11	1.64	17.0	8.0	.016
Age ≥35 (n: 22)	18.64	2.28	18.0	9.0	
Postoperative 1st year					
Age <35 (n: 28)	14.64	1.13	14.0	3.0	.224
Age ≥35 (n: 22)	15.00	1.48	15.0	6.0	

ASEX, Arizona Sexual Experience scale.

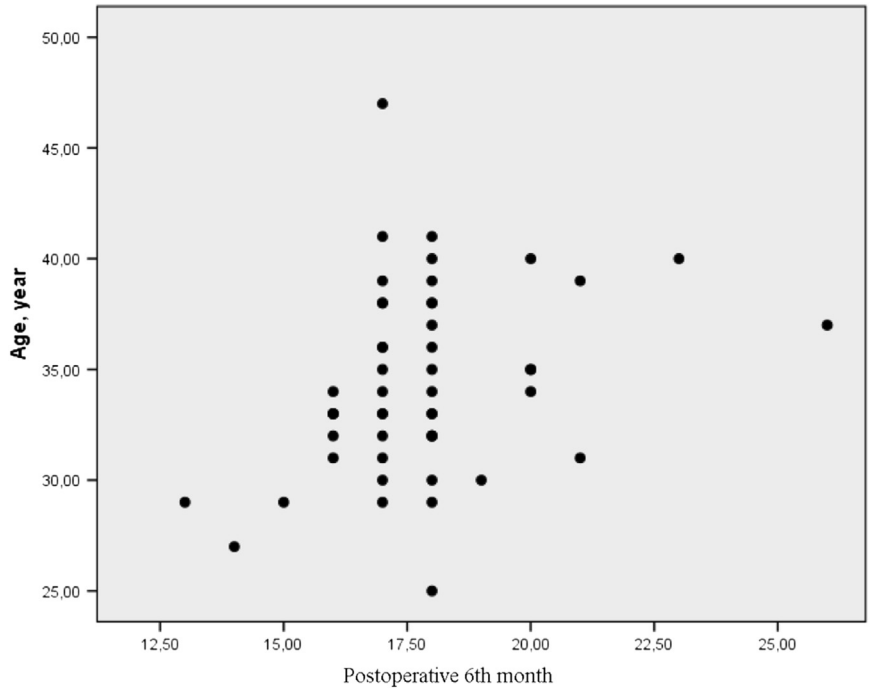

Fig. 3. Scatter plots of the age and total ASEX scores at the postoperative 6th month. ASEX, Arizona Sexual Experience scale.

of the husbands was not affected by the surgery and they did not have any sexual dysfunction.

Although this study was one of the rare studies focusing on the effect of surgical treatment of DDH sexual function, it had some limitations; the fact that the subject was a difficult and private one for Turkey directly affected the data gathering process. Although the questionnaire had only 5 questions, the participants had difficulty reporting about sexual matters. This might have caused the participants to give answers that did not objectively represent their situations.

Husbands were reluctant to give information and to answer the questionnaire and some of them refused to participate in the study because they considered this a private matter. Additional limitations of this study are the fact that personal and environmental factors that may affect sexual functions and hip-specific patient-reported outcome measures were not evaluated.

Because this study was cross-sectional, data were limited to the study sample and to the period when the study was conducted. Further studies which evaluate environmental and personal factors that may affect sexual functions with bigger patient populations and more detailed questionnaires are needed.

Table 8
Evaluation of the Correlation Between the Age Variable and ASEX Scores at the 3 Different Time Points of the Women and Their Husbands.

		Female (n:50)	Male (n:30)
Preoperatively	r	0.174	−0.346
	P	.228	.061
	n	50	30
Postoperative 6th month	r	0.309	-
	P	.029	-
	n	50	-
Postoperative 1st year	r	0.240	0.082
	P	.093	.668
	n	50	30

ASEX, Arizona Sexual Experience scale.

Conclusion

To the best of our knowledge, this is the first study that examines sexual function in the preoperative and postoperative period aiming to determine if the surgical procedure improves sexual function in female patients with DDH and their husbands. A positive improvement was observed in women who were treated with THA secondary to DDH, based on the ASEX questionnaire; however, the same improvement was not observed in their husbands. Because sexual function is directly affected by functionality, this was a striking result. On the other hand, orthopedists should take sexual life into consideration, in addition to pain, cosmetic results, and functionality, when making a decision about surgery, because it is a physiological necessity that affects quality of life and emotional status.

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