

The Effects of Age at Circumcision on Premature Ejaculation



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SUMMARY

Objective: The objective of this study was to analyze the effect of age at circumcision on premature ejaculation (PE).

Materials and Methods: The study included 40 healthy male controls and 40 male patients diagnosed as PE according to American Psychiatric Association criteria and the Golombok-Rust Inventory of Sexual Satisfaction (GRISS) premature ejaculation subscale. The 2 groups were compared according to age at circumcision and GRISS score.

Results: The PE group and control group were sociodemographically similar, but differed in marital status. The groups differed in GRISS communication, degree of satisfaction, avoidance, sensuality, erectile dysfunction, and PE subscale scores. These differences only displayed a dysfunction in the degree of satisfaction and premature ejaculation subscales. The groups also differed in age at circumcision; accordingly, those that were circumcised at ≥ 7 years of age had higher GRISS scores and a higher risk of having PE than those that were circumcised at > 7 years of age.

Conclusion: Age at circumcision had an effect on PE; circumcision at ≥ 7 years of age was associated with an increase in the risk of PE, as compared to circumcision at > 7 years of age. We think that families should have their boys circumcised before the age of 7 years and highly recommend that the procedure be performed within in the first 3 years of life.

Keywords: Circumcision, sexual dysfunction, castration complex

INTRODUCTION

Premature ejaculation (PE) is a common sexual dysfunction and effects males of every age group (Goldstein 2003). According to American Psychiatric Association (1994) criteria, PE refers to the persistent or recurrent discharge of semen with minimal sexual stimulation before, on, or shortly after penetration, before the person wishes it, and earlier than he expects it. The frequency of PE increases as the level of education increases (Sadock 2007). Laumann et al. (1999) reported that sexual dysfunction was associated with marital status in a group of 140 males and 1749 females aged 18-59 years living in the US; it is indicated that the before and after marriage situations of the individuals (singleness, divorce, separation) and increases the risk of encountering sexual dysfunction.

According to a study on attitudes and behaviors related to sexual relationships that collected data from 27,000 individuals, the worldwide incidence of PE is 21.4%. The incidence is 29.1% in East Asia, 28.3% in Central and South America, and 21.1% in Europe. The lowest PE prevalence rate (12.4%) was in Algeria, Egypt, Morocco, South Africa, and Turkey (Laumann et al. 2005). Nonetheless, Yılmaz et al. (2010) reported that the PE incidence rate among married males in Konya, Turkey is 29.3%. In Turkish society, Muslim men's hiding of their problems or not considering their negative situation as a problem which they are in, may be misleading in determining the frequency of sexual dysfunction such as PE. Yetkin and Saatçioğlu (1998) observed that 75% of males they studied had a sexual dysfunction, though they did not self-report having any. Similarly, Yıldırım et al. (2011)

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observed that consistency between diagnosis and symptoms at complaining was low in 50% of males with diagnosis of PE.

Various physiological and psychological factors play a role in the development of PE. Stress related to the quality of sexual performance can make it difficult for some men to control ejaculation. Sexual activity with the prostitutes who waiting to be finished quickly in an environment which may be inappropriate, and engaging in sexual intercourse (usually for the first time) while anxious may result in PE due to negative conditioning. The conflict between parent and child, interpersonal hypersensitivity, sexual guilt, and sexual success with the perfectionism of a stressful marriage are among the psychological factors that trigger PE (Sadock 2007).

Neurobiological theory explains that motor learning is involved in the development of PE; ejaculation control is learned beginning with the first sexual experiences within the framework of structural specialities and maturation, if motor learning is disrupted due to various factors (being more sensitive as physiologically or excessive more anxiety) PE may develop (Çavaş 2008). Physiological research shows that bulbocavernosus reflex nerve latency in men with PE is shorter than in those without PE. PE may be explained with some men's being more sensitive to sympathetic stimulation (Sadock 2007). Jannini and Lenzi (2005) reported that circumcision causes structural changes (due to desensitization and keratinization on the glans) and has a positive effect on PE.

Today, about 25% of males worldwide undergo circumcision, a surgical procedure that is performed for medical and/or cultural and religious reasons (Duns Muir and Gordon 1999; Elder 2007). In Turkey, this surgery, commonly is performed depending on religious reasons in childhood and medical problems in newborn and the first age groups (Koçak et al. 2001). Although circumcision is an important tradition in Turkey and is usually performed during childhood, Öztürk (2004) reported that it is a subject of interest in urological research, but has not been researched by the mental health community.

The effects of circumcision on sexual dysfunction have been examined in numerous studies. One study reported that circumcision did not increase the risk of sexual dysfunction in men (Laumann et al. 1999). Collins et al. (2002) reported that circumcision during adulthood does not negatively affect erection, ejaculation, or sexual pleasure. Research findings concerning the effects of circumcision on PE are inconsistent. In a research, by the time the effects of the circumcision in adulthood have not been met, according to circumcision previous status, it has been observed that it extends ejaculation latency period (Şenkul et al. 2004); however, Kim and Pang (2006) reported that circumcision did not affect the ejaculation latency period. A clinical study reported that whereas

31.8% of patients had PE prior to circumcision, the rate decreased to 13.6% following circumcision (Cortés-González et al. 2009). In another study it was observed that the foreskin was related to PE, directly or indirectly. In addition, it was reported that circumcision was an effective medical treatment for PE (Zhang et al. 2006). In contrast to the results of the research of Song et al. (2010) it was observed that, in 110 of 600 Korean males with PE being circumcised was not related to PE. Another study reported that 64% of males that were circumcised in adulthood reported that both before and after circumcision they did not experience PE. On the other hand, 13% of the sample reported that according to their life in terms of PE has positive advance and 33% reported that PE has negative advance (Masood et al. 2005). Janini and Lenzi (2005) reported that circumcision may not affect the control of ejaculation entirely, but when a society which has tradition of circumcision in childhood, is subject; they noted that possible affects of this situation may affect the adulthood sexuality

All the above-mentioned studies considered whether or not the participants had been circumcised, but did not consider age at circumcision. This can be explained that it is due to the fact that circumcision is not common in Christian communities. A search of the literature showed that only one study in Turkey investigated the effects of sexuality of age at circumcision; Aydur et al. (2007) studied 107 participants circumcised before the age of 12 years (0-2 years: n = 12; 3-5 years: n = 29; 6-12 years: n = 66) and reported that age at circumcision was not related to sexual disorders. Furthermore, according to Golombok-Rust Inventory of Sexual Satisfaction (GRISS) scores those that were circumcised at 3-5 years of age exhibited avoidance of sexual behavior to a significantly greater degree than those that were circumcised at 0-2 years of age. In addition, the rate of sexual disorders among the participants was over and the most common was PE (49.5%).

Freud (1920) reported that circumcision was associated with the castration complex and Öztürk (1973) -concerning the importance of age at circumcision- reported that circumcising boys aged 3-7 years, a time when they fear castration, may cause the castration complex to manifest. Based on the hypothesis that circumcision during the phallic stage might negatively affect adult sexuality, the present study aimed to determine the effects of age at circumcision on PE.

MATERIALS AND METHODS

Participants

The study included 160 heterosexual male soldiers that volunteered to participate. The participants were interviewed individually, during which time they were given preliminary information about the study, and data collection forms and

Table 1. Sociodemographics and comparison of the groups according to age at first sexual intercourse.

	PE Group (n = 40)	Control Group (n = 40)	χ^2	z	t	p
	Frequency (%) or Mean $\pm$ SD					
Age (years)	25.25 $\pm$ 4.5	26.67 $\pm$ 5.14		-1.37		0.17
Education			2.67			0.26
Primary	7 (17.5)	3 (7.5)				
High School	17 (42.5)	15 (37.5)				
Bachelor's degree or higher	16 (40)	22 (55)				
Marital status			4.45			0.03*
Married	9 (22.5)	19 (47.5)				
Not married	31 (77.5)	21 (52.5)				
Income Monthly (Turkish lira)			4.61			0.09
0 – 1000	13 (32.5)	10 (25)				
1000-1500	11 (27.5)	5 (12.5)				
>1500	16 (40)	25 (62.5)				
Age at First Sexual Intercourse	18.94 $\pm$ 3.09	18.18 $\pm$ 2.35			1.19	0.23

*, p < .05

psychometric scales were administered. Out of these men who were defined with any disease except PE all polyclinics apart from psychiatry and any one reported any disease any psychiatric drug users were set apart. Of those that remained, 40 healthy men (*Mean* = 26.67 years, age range = 20-40) without sexual disorders according to GRISS were included in the control group and 40 men (*Mean* = 25.25 years, age range = 20-39) that met American Psychiatric Association (1994) criteria for PE were included in the PE group. In the group which was diagnosed with PE, (8.45) points which signs disorder over the average point 5 in terms of PE was observed (Table 2). Independently from the research, participants who were diagnosed with PE were informed about treatment and were noticed that they can be given appointment.

This study was conducted by the Kayseri Military Hospital, Psychiatry Department between 2009 and 2010, and the study protocol was approved by the Erciyes University Faculty of Medicine Ethics Committee.

Data collection forms

A sociodemographic form was prepared to collect the following participant data: age, monthly income, level of education, marital status, and age at first sexual intercourse. A circumcision information form was used to collect data concerning the occupational status of the person that performed each participant's circumcision, why they were circumcised, case of being circumcised against will, age at circumcision, use of anesthesia during circumcision, and circumcision-related complications. If a participant did not know or remember their age at circumcision their parents were asked to supply the information.

The GRISS inventory was developed by Rust and Golombok (1986), and was adapted for use in Turkey by Tuğrul, Öztan,

and Kabakçı (1993), who reported that the Turkish version was reliable and valid for use in Turkey. The 28-item scale has male and female versions for measuring sexual problems and their severity. The male form used in the present study includes frequency, communication, satisfaction, avoidance, touching, erection, and premature ejaculation sub-dimensions. Sub-dimension scores ≥ 5 indicate disorder. High total and/or sub-dimension scores indicate disorder in sexual intercourse performance and the quality of intercourse.

Data analysis

Data were analyzed using SPSS v.16.0. Data that according to the Kolmogorov-Smirnov test for permanent variables (age, GRISS sub-dimension scores) were not normally distributed were analyzed using the Mann-Whitney U test, and nominal variables (level of education, monthly income, marital status, and variables due to circumcision) were analyzed using the chi-square test. The Kruskal-Wallis test was used to compare differences in GRISS sub-dimension scores and age at circumcision between the groups. The first sexual-intercourse age rate that supports the normal distribution rule and for the total GRSSC scores also T-test was used.

RESULTS

Age, level of education, and monthly income were similar in both groups ($p > 0.05$). In the PE group 22.5% were married and 77.5% were single, versus 47.5% married and 52.5% not married in the control group; the difference was not significant ($p > 0.05$). Furthermore, age at first sexual intercourse did not differ significantly between the groups (PE group: $M = 18.18$, $SD = 0.35$) ($p > 0.05$) (Table 1).

Table 2. Comparison of the groups, according to GRISS sub-dimension scores.

GRISS	PE Group (n = 40)	Control Group (n = 40)	z	t	p
Mean Rank (Mean $\pm$ SD)					
Frequency	40.66 (3.75 $\pm$ 1.62)	40.34 (3.85 $\pm$ 2.28)	-0.63		0.949
Communication	48.79 (3.52 $\pm$ 2.13)	32.21 (2.02 $\pm$ 1.62)	-3.23		0.001**
Degree of satisfaction	47.89 (5.47 $\pm$ 3.03)	33.11 (3.67 $\pm$ 2.84)	-2.85		0.004*
Sensuality	46.52 (4.40 $\pm$ 3.71)	34.48 (2.40 $\pm$ 2.36)	-2.34		0.019*
Erectile dysfunction	49.44 (4.65 $\pm$ 2.15)	31.56 (2.97 $\pm$ 2.08)	-3.48		0.000**
PE	60.50 (8.45 $\pm$ 1.48)	20.50 (2.72 $\pm$ 1.48)	-7.78		0.000**
Avoidance	47.25 (3.55 $\pm$ 3.04)	33.75 (1.87 $\pm$ 2.02)	-2.63		0.008*
Total points	- (38.8 $\pm$ 12.6)	- (21.5 $\pm$ 9.6)		6.87	0.000**

*p < 0.05, **p $\leq$ 0.001
Note: Sub-dimension scores $\geq$ 5 indicate dysfunction

GRISS total raw score in the PE group ($M = 38.80 \pm 12.65$) and control group ($M = 21.50 \pm 9.66$) did not differ significantly ($p < .001$). The following GRISS sub-dimension scores differed significantly between the 2 groups: communication ($z = -3.23$, $p = 0.001$), satisfaction ($z = -2.85$, $p = 0.004$), touch ($z = -2.34$, $p = 0.019$), erection ($z = 3.46$, $p = 0.000$), PE ($z = -7.78$, $p = 0.000$), and avoidance ($z = -2.63$, $p = 0.000$). Apartly from this, as expected in the research, the criteria of satisfaction ($M = 5.47 \pm 3.03$) and PE ($M = 8.45 \pm 1.48$) in minimum levels was seen over 5, disorder average point. These findings are presented in Table 2.

There was not a significant difference in any of the variables related to circumcision between the PE and control groups (occupational status of the person that performed the circumcision, why circumcision was performed, use of anesthesia during circumcision, circumcision-related complications, and being circumcision against will) ($p > 0.05$); however, age at circumcision did differ significantly between the groups ($p < 0.001$). Among the 40 PE group participants, 7 (17.5%) were circumcised at age 0-3 years, 4 (10%) at age 3-7 years, 16 (40%) at age 7-11 years, and 13 (32.5%) at age ≥ 11 years. In the control group 15 participants (37.5%) were circumcised

Table 3. Comparison of the groups, according to circumcision variables.

	PE Group (n = 40)	Control Group (n = 40)		
	Frequency (%)		χ^2	p
Age at Circumcision (years)			26.6	0.000**
0-3	7 (17.5)	15 (37.5)		
3-7	4 (10)	18 (45)		
7-11	16 (40)	6 (15)		
>11	13 (32.5)	1 (2.5)		
Who performed circumcision			3.82	0.14
Doctor	23 (57.5)	17 (42.5)		
Health officer	5 (12.5)	12 (30)		
Circumcision officer without title	12 (30)	11 (27.5)		
Reason of Circumcision			0.77	0.37
Religious	31 (77.5)	35 (87.5)		
Doctor recommendation	9 (22.5)	5 (12.5)		
Forced circumcision			0.87	0.34
Yes	5 (12.5)	9 (23.1)		
No	35 (87.5)	30 (76.9)		
Anesthesia			0.67	0.58
Yes	33 (82.5)	30 (75)		
No	7 (17.5)	10 (25)		
Complication after circumcision			1.62	0.20
Yes	5 (12.5)	1 (2.5)		
No	35 (87.5)	39 (97.5)		

** p < .001

Table 4. Comparison of GRISS sub-dimensions, according to age at circumcision.

GRISS	Circumcision age (years)				χ^2	P	Difference Source
	0-3 (A) (n=22)	3-7 (B) (n=22)	7-11 (C) (n=22)	≥ 11 (D) (n=14)			
	Mean $\pm$ SS						
Frequency	3.40 $\pm$ 2.19	4.09 $\pm$ 2.24	4.40 $\pm$ 1.46	3.00 $\pm$ 1.56	6.31	0.09	-
Communication	2.72 $\pm$ 1.75	2.59 $\pm$ 2.10	3.00 $\pm$ 2.26	2.78 $\pm$ 2.11	0.37	0.94	-
Degree of satisfaction	3.68 $\pm$ 2.19	3.86 $\pm$ 2.81	5.86 $\pm$ 3.45	5.07 $\pm$ 3.45	6.60	0.08	-
Sensuality	2.27 $\pm$ 2.22	2.09 $\pm$ 2.34	3.36 $\pm$ 2.27	3.35 $\pm$ 4.12	4.22	0.23	-
Erectile dysfunction	3.00 $\pm$ 2.92	3.09 $\pm$ 2.81	3.81 $\pm$ 3.80	3.85 $\pm$ 3.65	0.27	0.96	-
PE	3.54 $\pm$ 2.44	3.72 $\pm$ 2.29	4.22 $\pm$ 2.15	3.71 $\pm$ 2.26	0.89	0.82	-
Avoidance	4.63 $\pm$ 2.83	3.86 $\pm$ 2.98	6.63 $\pm$ 3.25	8.14 $\pm$ 1.91	19.28	0.000**	(A-C/A-D) (B-C/B-D)
Total points	25.81 $\pm$ 11.51	26.04 $\pm$ 13.12	35.54 $\pm$ 15.20	34.92 $\pm$ 14.88	8.61	0.03*	(A-C/A-D) (B-C/B-D)

*P < .05, **P < .001

Note: Sub-dimension scores ≥ 5 indicate dysfunction.

at age 0-3 years, 18 (45%) at age 3-7 year, 6 (15%) at age 7-11 years, and 1 (2.5%) at age ≥ 11 years (Table 3).

There weren't any significant differences in the GRISS frequency, communication, degree of satisfaction, avoidance, sensuality, or erectile dysfunction sub-dimension scores, according to age at circumcision ($p > 0.05$), but there was a significant difference in GRISS PE sub-dimension scores, according to age at circumcision ($p < 0.001$). To determine which age range hosts this difference, separate Mann Whitney U tests were implemented. Accordingly, those circumcised at age 7-11 years and ≥ 11 years had higher GRISS PE sub-dimension scores than those circumcised at age 0-3 years and 3-7 years (0-3 years and 7-11 years: $p = 0.033$; 0-3 years and ≥ 11 years: $p = 0.001$; 3-7 years and 7-11 years: $p = 0.007$; 3-7 years and ≥ 11 years: $p = 0.000$). Additionally, mean GRISS PE sub-dimension score among those circumcised at age 7-11 years and ≥ 11 years was > 5 ; 5 is the cut-off score that indicates dysfunction (Table 4).

DISCUSSION

The present study examined the effects of age at circumcision on PE, and included 40 males diagnosed as PE according to American Psychiatric Association (1994) criteria and 40 healthy male controls. The diagnosis of PE was confirmed based on GRISS sub-dimension scores. The two groups did not differ in age, level of education, or age at first sexual intercourse, but more of the PE group participants were not married than those in the control group. Although some studies (Lauman et al. 1999; Fasolo et al. 2005) report that marriage reduces the incidence of PE, the protective effect of marriage remains controversial. It was reported that

among unmarried men, infrequent sexual intercourse and multiple sexual partners might increase sexual excitement, increasing the potential for PE (Sadock 2007). The possible anxiety that may occur during sexual intercourse (with considering that unmarried men may get more excited) is an important variant to stimulate PE (Rowland 2005). Nonetheless, some studies report that there is not a relationship between PE and marital status (Akkuş et al. 2002; Song et al. 2010) and as such the protective effect of marriage against PE remains unclear.

The PE and control groups did not differ in terms of the occupational status of the person that performed the circumcision, why circumcision was performed, being circumcision against will, use of anesthesia during circumcision, or circumcision-related complications, indicating that these variables had no effect on PE; however, age at circumcision did differ between the groups, indicating that this variable played a role in PE. In the control group 82.5% were circumcised at < 7 years of age, whereas in the PE group 72.5% were circumcised at age ≥ 7 years, indicating that circumcision at age ≥ 7 years was a significant risk factor for PE. On the other hand, circumcision at < 7 years was not a risk factor for PE. Thus, the incidence of PE was higher among those circumcised at age 7-11 years and at ≥ 11 years than among those circumcised at age 0-3 years and at 3-7 years. In the only other study on the effects of age at circumcision on PE, Aydur et al. (2007) reported that those that were circumcised at age 3-5 years and at 0-2 years differed only in GRISS avoidance sub-dimension score; However, it was reported that this difference was not at the level of dysfunction of sexual avoidance, which is not in agreement with the present results.

Circumcision during the phallic stage and PE

According to our findings, 10%, which is the ratio of encountering PE for the boys who get circumcised between the ages of 3-7 (phallic stage), is the lowest ratio compared to the other age ranges. This finding is not expected, as Freud (1920) reported that fear of castration may be associated with circumcision, it has been recommended that circumcision not be performed during the phallic period. Cansever (1965) studied 12 boys aged 4-7 years before and after circumcision, and reported that the boys considered the procedure as castration or an attack against their body. Öztürk (1973) also reports that circumcision triggers castration fear (in the process and at the time of circumcision). Öztürk also argues that in Turkey boys are mostly circumcised at a time when castration fear is on the increase (ages 3-7). He believes this leads to such fears as "Something bad is going to happen to my penis", or "A part of it will be cut", which may cause a heightened castration chaos. Similarly, Yetkin (1997) states that men who experience preadolescence trauma (Castration fear, which occurs due to circumcision, can be considered as a trauma) have three times more erection problem and two times more PE and decreased sexual desire than those who do not experience such a trauma.

In the present study we observed that circumcision during the phallic stage (3-7 years) was associated with a negligible risk of PE in adulthood; therefore, we do not think there is a relationship between the castration complex and PE. This unexpected result may have been related to the role of circumcision in Turkish society. In Turkey, circumcision is considered as a symbol for boys to enter a phase in which they have a sexual life and the ability to reproduce. An uncircumcised boy is under emotional stress because in Turkish society an uncircumcised man is considered a premature man (Şahin et al. 2003). Öztürk (1973) reported that the traditional circumcision ceremony and party, as practiced in Turkey, might function to reduce the fear of castration. In terms of Ericson's developmental theory (1963), as children identify with their same sex parent, boys that enter phallic stage uncircumcised and/or complete this period uncircumcised may have problems indentifying with their fathers. Numberg (1947) reported that circumcision might help boys to identify with their fathers.

Post-phallic stage (age ≥ 7 years) circumcision and PE

According to Ericson's theory (1963), when a child is 6-7 years old he is almost ready to enter the real life with his psychological construction. If a boy loses his hope of tools (paraphernalia and materials) and his skills or his position among his colleagues, he abstains identifying himself from them and equating himself from part of his word of tools. In this way,

being despaired of his tools word and physical facilities (parts of body) or extremities (hands, legs sexual organs etc.) will have inability and inferiority complex. To enter this stage uncircumcised- in line with the perception of "I am not a real man yet"- creates a feeling of deficiency in physical qualities and thus, boys in Turkey may have feelings of incompetence and inferiority. Öztürk (2004) also agrees with the comment that in Turkey, not being circumcised means not being a man and being excluded from society; therefore, circumcision has become a necessity for self-respect. Öztürk also emphasizes the fact that in Turkey being uncircumcised, regardless of the age of circumcision, will cause strong feelings of inferiority and embarrassment. Moreover, he argues that a boy who believes that his *tools* (hands, legs, sexual organ etc.) are weak and insufficient may become dependent, shy, and incompetent. From the perspective of Turkey, unless the condition of being circumcised, which is one of the main expectations of society, is met, it can be anticipated that this period cannot be completed wholesomely for a boy. Consequently, the state of anxiety which may occur due to feelings of inferiority and incompetence resulting from "delayed circumcision" plays an important role in the triggering of PE, which may be characterised as "sexual incompetence" in the period of adulthood.

Circumcision is a procedure that changes an individual's physical integrity. Experiencing the loss of a part of the penis can result in stress, depression, and sexual dysfunction (Maguire and Parkes 1988). Viewed from this perspective, as one ages, the meaning that a circumcised person attaches to conception of body and the loss of a body part may take on different dimensions depending on physical and mental maturity. Thus, delayed circumcision might play role in the development of PE. This leads us to question why delayed circumcision doesn't trigger erectile dysfunction together with PE, which we think is because anxiety is closely related to PE. A study (Kosten et al., 1983) which reveals that individuals with deep anxiety experience premature ejaculation is remarkable in that it verifies this relationship. In other words, anxiety which delayed circumcision creates depending on the disruptions occurring in the psychodynamic and psychosocial development stages is related with the control of ejaculation. Yet, there is no proof that it is related to erectile dysfunction. Similarly, why stress related to sexual performance leads to PE, but not to erectile dysfunction remains unknown (Çavaş 2008).

The physiopathological origins related to how delayed circumcision triggers PE are going over the aim and limits of the data obtained in our research. Additionally, the pathophysiology of PE and its association with the nervous system is not known in detail (Grenier et al. 1995; Özcan et al. 2001). Physiological studies show that men with PE have shorter period of bulbocavernosus reflex nerve delay and some men are more sensitive toward sympathoexcitation (Sadock 2007).

Both of which may develop in association with circumcision. Currently, sufficient data to clarify the relationship between the physiopathological origins of PE and delayed circumcision (at age ≥ 7 years) are lacking.

The most appropriate age for circumcision

According to Öztürk (1973), $\geq 50\%$ of boys in Turkey get circumcised at the age of 3-7 years, 25%-30% between 8-11 years, and the rest at <3 years and >11 years, whereas Aydur et al. (2007) reported that 11% of boys in Turkey get circumcised at age 0-2 years, 27.1% at 3-5 years, and 61.7% at age 6-12 years. According to the results of these 2 studies and those of the present study, a considerable proportion of boys in Turkey are circumcised at an age (≥ 8 years) associated with the risk of PE. In the present study, while the PE group who got circumcised at the ages of 3-7 have the lowest rate (10%) of experiencing premature ejaculation, this rate does not show a statistically significant difference compared to the boys who got circumcised at the ages of 0-3 years (17.5%). Based on this result, boys should be circumcised before the age of 7 years; however, based on psychiatric research (Cansever 1965, Öztürk 1973), urological research (Ekmekçioğlu et al. 1999; Yılmaz et al. 2008), and the present findings we think circumcision should be performed at age 0-3 years. Thus, a boy will enter the phallic stage (ages 3-7) as circumcised. In other words, the boy will not worry that he will get circumcised. And thus, the "circumcision" handicap which prevents the child from identifying with his father will be overcome. As a result, since the boy will be in a situation in which he is praised and supported by the society, he will not suffer from the fear of castration.

This study aimed to highlight the lack of research on circumcision and the importance of age at circumcision. As a result, our study asserts that parents should pay attention to the "age effect" before they have their children circumcised. There is yet no definitive proof that circumcision causes PE. Nonetheless, age at circumcision, depending on the reasons specific to Turkish culture, can affect PE during adulthood according to the obtained findings. At this point, it will be useful to remember how personal development may be affected by cultural features.

The present study has some limitations. Firstly, it was performed in a particular cultural environment. As almost all Turkish men are circumcised, there is no uncircumcised group in the study, and the sample size is not big enough. Another limitation of the study is that the number of married participants and that of the single ones is not equal, and the sample does not focus on a specific group (married or single participants). The fact that the number of single participants is significantly higher in the PE group constitutes another limitation. While giving retrospective information regarding the circumcision age, the participants might have been

mistaken by one or two ages, which is one major limitation in the study. It is necessary and useful to reveal the relationship between the circumcision age and sexual life and sexual dysfunction in adulthood through some further controlled research with a large sample size.

REFERENCES

- American Psychiatric Association (1994) DSM-IV - Diagnostic and Statistical Manual of Mental Disorders - 4th Ed. American Psychiatric Association, Washington DC.
- Akkuş E, Kadioğlu A, Esen A, et al (2002) (Turkish Erectile Dysfunction Prevalence Study Group). Prevalence and correlates of erectile dysfunction in Turkey: A population-based study. *Eur Urol*, 41: 298-304.
- Aydur E, Gungor S, Ceyhan ST, et al (2007) Effects of childhood circumcision age on adult male sexual functions. *Int J Impot Res*, 19: 424-31
- Cansever G (1965) Psychological effects of circumcision. *Br J Med Psychol*, 38: 321-31.
- Çavaş Ş (2008) Cinsel İşlev Bozuklukları Polikliniğine Başvuran Vajinismus ve Prematür Ejakülasyon Olgularında Psikiyatrik Komorbiditenin Araştırılması. Bakırköy Ruh ve Sinir Hastalıkları Eğitim ve Araştırma Hastanesi, yayınlanmamış uzmanlık tezi, İstanbul.
- Collins S, Upshaw J, Rutchic S, et al (2002) Effects of circumcision on male sexual function: Debunking a myth? *The J Urol*, 167: 2111-12.
- Cortés-González JR, Arratia-Maqueo JA, Martínez-Montelongo R, et al (2009) Does circumcision affect males perception of sexual satisfaction? *Arch Esp Urol*, 62: 733-6.
- Dunsmuir WD ve Gordon EM (1999) The history of circumcision. *BJU Int*, 83: 1-12.
- Ekmekçioğlu O, Nas H, Yılmaz U, et al (1999) Prepusyum retraktilesi ve sünnetle ilişkisi, *Türk Üroloji Dergisi*, 25: 174-7.
- Elder JS (2007) Circumcision. *BJU Int*, 99: 1553-64.
- Erikson EH (1963) İnsanın Sekiz Çağı, Çev. TB Üstün, V Şar). Birey ve Toplum Yayıncılık, Ankara, 1984.
- Fasolo CB, Mirone V, Gentile V, et al (2005) Premature ejaculation: prevalence and associated conditions in a sample of 12,558 men attending the Andrology Prevention Week 2001-A study of the Italian Society of Andrology (SIA). *J Sex Med*, 2: 376-82.
- Freud S (1920) Introductory lectures on psychoanalysis. New York, Norton, 1966, s. 165.
- Goldstein I (2003) Premature to early ejaculation: A sampling of manuscripts regarding the most common male sexual dysfunction published in the IJIR. *The Journal of Int J Geriatr Psychiatry exual Medicine. Int J Impot Res*, 15: 307-8.
- Grenier G, Byers ES (1995) Rapid ejaculation: A review of conceptual, etiological, and treatment issues. *Archives of Sexual Behavior*, 24: 447-72.
- Jannini EA, Lenzi A (2005) Epidemiology of premature ejaculation. *Curr Opin Urol*, 15: 399-403.
- Kim D, Pang M-G (2007) The effect of male circumcision on sexuality. *BJU Int*, 99: 619-22.
- Koçar I, Özkök S, Dündar M, et al (2001) Bir toplu sünnet uygulaması ve sonuçlarının medikolegal yönden değerlendirilmesi. *Türk Üroloji Dergisi*, 27: 65-9.
- Kosten T, Redmand DE, Reiser MF (1983) Spontaneous ejaculation associated with anxiety: Psychophysiological considerations. *American Journal of Psychiatry*, 140: 1163-66.
- Laumann EO, Paik A, Rosen RC (1999) Sexual dysfunction in the United States: Prevalans and predictors. *JAMA*, 281: 537-44
- Laumann EO, Nicolosi A, Glasser DB, et al (2005) Sexual problems among women and men aged 40-80 y: prevalence and correlates identified in the Global Study of Sexual Attitudes and Behaviors. *Int J Impot Res*, 17: 39-57.
- Maguire P, Parkes CM (1998) Coping with loss: Surgery and loss of body parts. *BMJ*, 316: 1086-88.

- Masood S, Patel HR, Himpson RC, et al (2005) Penile sensitivity and sexual satisfaction after circumcision: are we informing men correctly? *Urol Int*, 75: 62–6.
- Moses S, Bailey RC, Ronald AR (1998) Male circumcision: Assessment of health benefits and risks. *Sex Transm Infect*, 74(5): 368–73.
- Nunberg H (1947) Circumcision and the problems of bisexuality. *Int J PsychoAnal*, 28: 145–79.
- Özcan C, Özbek E, Soyly A, et al (2001) Auditory event-related potentials in patients with premature ejaculation. *Urology*, 58: 1025–29.
- Öztürk OM (1973) Ritual circumcision and castration anxiety. *Psychiatry: Journal for the Study of Interpersonal Processes*, 36: 49–60.
- Öztürk MO (2004) Ruh sağlığı ve bozuklukları, Onuncu Baskı, Nobel Tıp Kitabevleri, Ankara.
- Rowland DL (2005) Psychophysiology of ejaculatory function and dysfunction. *World Journal of Urology*, 23: 82–8.
- Rust J, Golombok S. (1986) The GRISS: a psychometric instrument for the assessment of sexual dysfunction. *Arch. Sex Behav*, 15: 157–65.
- Sadock VA (2007) Normal insan cinselliği ve cinsel işlev bozuklukları. Kaplan & Sadock's Comprehensive Text Book of Psychiatry, 8. Baskı, cilt 2, V Kaplan, B Sadock (Ed), (Çev. ed.: H Aydın, A Bozkurt) Güneş Kitabevi, Ankara, s. 1921.
- Song SH, Kim SW, Paick J-S, et al (2010) Self-Reported Premature Ejaculation Prevalence and Characteristics in Korean Young Males: Community-Based Data From an Internet Survey. *J Androl*, 31: 540–6.
- Şahin F, Beyazova, U, Aktürk A (2003) Attitudes and practices regarding circumcision in Turkey. *Child Care Health Dev*, 29: 275–81.
- Şenkul T, İşleri C, Şen B, et al (2004) Circumcision in adults: effect on sexual function. *Urology*, 63: 155–8.
- Tuğrul C, Öztan N, Kabakçı E (1993) Golombok-Rust Cinsel Doyum Ölçeği'nin standardizasyon çalışması (GRISS). *Türk Psikiyatri Derg*, 4: 83–8.
- Yetkin N, İncesu C (1997) Cinsel işlev bozukluklarında kullanılan terimlerin gözden geçirilmesi. *Nöropsikiyatri Arşivi*, 34: 214–18.
- Yetkin N, Saatçioğlu Ö (1998) Normal evli erkeklerde cinsel işlevin değerlendirilmesi. *Nöropsikiyatri Arşivi*, 35: 108–112.
- Yıldırım EA, Akyüz F, Hacıoğlu M, et al (2011) Cinsel işlev bozuklukları kliniğine başvuran olgularda başvuru yakınması ile klinik tanı arasındaki ilişki. *Nöropsikiyatri Arşivi*, 48 (Özel 1): 24–30.
- Yılmaz E, Zeytinci İE, Sarı S, et al (2010). Konya İl Merkezi'nde yaşayan evli nüfusta cinsel sorunların araştırılması. *Türk Psikiyatri Derg*, 21: 126-134.
- Yılmaz Y, Özsoy SA, Ardahan M, (2008) Annelerin sünnet hakkındaki davranış ve bilgi düzeylerinin incelenmesi. *Ege Tıp Dergisi*, 47: 93–101.
- Zhang SJ, Zhao YM, Zheng SG, et al (2006) Correlation between premature ejaculation and redundant prepuce. *Zhonghua Nan Ke Xue*, 12: 225–7.