Available online at www.medicinescience.org

ORIGINAL ARTICLE

Medicine Science International Medical Journal

Medicine Science 2021;10(2):362-6

The relationship between age of circumcision and premature ejaculation

Ibrahim Nuvit Tahtali

Department of Urology, Malatya Training and Research Hospital, Malatya, Turkey

Received 04 December 2020; Accepted 11 January 2021
Available online 27.03.2021 with doi: 10.5455/medscience.2020.12.249

Abstract

Premature ejaculation a male sexual dysfunction characterized by ejaculation which always or nearly always occurs prior to or within about one minute of vaginal penetration, and the inability to delay ejaculation on all or nearly all vaginal penetrations, and negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy. The effects of circumcision on PE have been the subject of much debate. There is also a great deal of disagreement about the appropriate age for circumcision. This study aims to investigate the relationship between circumcision age and premature ejaculation. The Intravaginal Ejaculatory Latency Time (IVELT) scale was used to measure the time interval between penetration and intravaginal ejaculation. Using the International Index of Erectile Function (IIEF-5), all cases' scores were evaluated. Using Premature Ejaculation Diagnostic Tool (PEDT) and ISSM definition of premature ejaculation, PE was diagnosed in patients. Participants' age of circumcision varied from 1 year to 20 years (mean ± SD 8.5 ± 4). The range of IVELT, PEDT, and IIEF values was 0 to 600 (mean ± SD 63.4 ± 89.16), 4 to 18 (mean ± SD 11.65 ± 31), and 24 to 29 (mean ± SD 26.7 ± 1.4). IVELT in the two groups of circumcision age under 7 and over 7 was significantly different (p-value = 0.01). It is observed that participants who are circumcised under 7 have a longer intravaginal ejaculation time than those who are circumcised over 7. These results showed no significant difference between PEDT (p-value = 0.6) and IIEF (p-value = 0.3) values between the two groups. It was concluded that PE is much more common in men circumcised after the age of 7, and the duration of IVELT decreases with the increase in circumcision age.

Keywords: IVELT, PEDT, IIEF, PE, circumcision

Introduction

There are several definitions of Premature Ejaculation (PE); All of these definitions agree that PE refers to a condition in which "the time interval from penetration to ejaculation is short, and ejaculation occurs before or shortly after penetration" or "the person does not have control over his ejaculation." [1] Regarding the time interval between penetration and ejaculation, the natural time to reach ejaculation in a man should average 4-5 minutes in normal men [2]. In most sources, if ejaculation occurs less than one minute from the onset of intercourse, it is considered premature ejaculation [3-6], and some consider time less than two minutes abnormal and premature [7].

The four PE syndromes are lifelong PE (Primary), acquired PE (Secondary), natural variable PE (Natural variable), and premature like ejaculatory dysfunction (Subjective).

***Corresponding Author:** Ibrahim Nuvit Tahtali, Department of Urology, Malatya Training and Research Hospital, Malatya, Turkey
E-mail: nuvit_tahtali@hotmail.com

In the case of lifelong ejaculation, always or in most cases occurs about 1 minute or less after vaginal penetration. In the acquired PE, there is a clinically significant reduction in intercourse time compared to previous experiences, which is about 3 minutes or less. In natural variable PE, various psychological and physical factors can cause situational and coincidental premature ejaculation. In premature like ejaculatory dysfunction, despite prolonged intercourse and ejaculation, patients may experience PE-related complaints. [8-10].

Ante-portal ejaculation is the term applied to men who ejaculate before vaginal penetration and is considered the most severe PE form. Such men or couples typically present when they are having difficulty conceiving children. It is estimated that between 5% and 20% of men with lifelong premature ejaculation (LPE) suffer from ante-portal PE [1].

To make premature ejaculation assessable, Waldinger [11] introduced Intravaginal Ejaculatory Latency Time (IVELT). IVELT is defined as the time interval between penetration and intravaginal ejaculation. Assessing PE using the IVELT became the basis of most current clinical research on premature ejaculation. IVELT variance has been reported in various studies in people with

premature ejaculation between 1 and 7 minutes.

Circumcision is an operation that involves cutting off all or part of the foreskin from a man's penis. The history of circumcision goes back to ancient Egypt. Today Muslims, Jews, and some parts of the world, including some Christians, circumcise their children. The sexual effects of circumcision have been the subject of much debate. This study aims to investigate the relationship between circumcision age and premature ejaculation [12].

Materials and Methods

In this study, the effect of circumcision age on PE was investigated in patients admitted to our clinic. All patients participating in this study were admitted to Malatya education and research hospital from April 2017 to September 2020. Data from 217 patients with PE were retrospectively evaluated for inclusion in the study. The ethical approval was obtained from the Inonu University Clinical Research Ethical Committee with the protocol number of 2020/168. Written informed consent was provided for all patients.

The inclusion criteria in the study were: 1) having normal luteinizing hormone (LH) levels; 2) having sex at least once a week with a non-pregnant partner; 3) Being between 20 to 56 years old; 4) Patients should have a stable monogamous relationship with the opposite sex; 5) Patients should have experienced PE in most of the intercourses during the last six months; 6) Patients and their partners should be inclined to have intercourse at the specified number of times during treatment.

The criteria for excluding participants from the study were: 1) having any psychosomatic disorder; 2) people whose PE was associated with urological or neurological diseases; 2) having primary or secondary hypogonadism; 3) having a history of alcohol or drug abuse; 4) Patients with concomitant sexual problems and abnormalities related to the penis that can affect PE; 5) patients with PE with reversible etiology; 6) patients admitting other concomitant therapies for PE; 7) Patients who score less than 21 on the International Index of Erectile Function (IIEF-5). Demographic information related to patients, including age, circumcision age, number of children, and marriage duration, were obtained from patients. During this retrospective study, routine biochemistry, hormone profiles, prostatic inflammation information, education levels, psychiatric status, and PE type were examined in PE patients.

The International Index of Erectile Function (IIEF-5) is a scale for measuring men's sexual performance. Using the International Index of Erectile Function (IIEF-5), all cases' scores were evaluated. In this test, patients with a score below 21 were considered Erectile Dysfunction (ED). After that, using Premature Ejaculation Diagnostic Tool (PEDT), PE was diagnosed in patients. Patients were classified according to PE classification. The Intravaginal Ejaculatory Latency Time (IVELT) scale was used to compensate for these problems and measure the time interval between penetration and intravaginal ejaculation. Based on the classifications made in a similar article [7], participants were divided into two groups based on the age of circumcision: participants circumcised at 7 years old and younger, and participants circumcised after 7 years old.

Statical Analysis

The normality of the variables was evaluated using the Kolmogorov-Smirnov test. Due to the abnormality of the variables, the Kruskal-Wallis test was used to examine the significant differences between each of the four variables. Mann-Whitney test was used to evaluate the significant differences between the studied variables in the two categories of circumcision age.

Spearman correlation test was also used to examine the relationship between Circumcision Age and IVELT, IIEF, and PEDT values. All p-values below 0.05 were considered significant. All data analyses have been performed with SPSS 26.1 software package (SPSS Inc., Chicago, USA).

Results

The descriptive statistics of participants, including Age, Number of children, and Circumcision age, are shown in Table 1.

Table1. Descriptive Statistics of variables

Variable	Mean	Sd	Min	Max
Age	36	8.3	24	56
Number of children	2	3	0	6
Circumcision Age	8.5	4	0	20
IVELT	63.4	89.16	0	600
PEDT	11.65	3.1	4	18
IIEF	26.7	1.4	24	29

As shown in Table 1, the youngest participant was 24 years old, and the oldest participant was 56 years old (mean ± SD 36 ± 8.3). Also, the minimum number of children of the participants was 0, and the maximum number of children of the participants was 6 (mean ± SD 2 ± 3). Participants' age of circumcision varied from 1 year to 20 years (mean ± SD 8.5 ± 4). The range of IVELT, PEDT, and IIEF values was 0 to 600 (mean ± SD 63.4 ± 89.16), 4 to 18 (mean ± SD 11.65 ± 31), and 24 to 29 (mean ± SD 26.7 ± 1.4).

After premature ejaculation classification of 217 patients, 133 patients (61.29%) were classified as Primary, 54 patients (24.88%) as Secondary, 20 patients (9.22%) as Natural variable, and 10 patients (4.61%) as Subjective type of PE. The statics of PE types are shown in Table 2.

Table 2. The statics of PE types

	Primary	Secondary	Natural variable	Subjective
Age	24-56 (36)	25-53 (38.16)	25-50 (36.95)	24-56 (39.75)
Circumcision Age	0-20 (9.84)	0-14 (6.76)	0-13 (7.12)	4-13 (9.60)
IVELT	0-300 (49.93)	0-120 (46.22)	0-600 (182.22)	60-600 (258.75)
PEDT	7-18 (12.05)	9-17 (13.16)	4-11 (6.40)	4-11 (7.25)
IEFF	24-29 (26.25)	25-29 (26.88)	25-29 (28.75)	25-29 (28.00)
Total (217 Patients)	**133 (%61.29)**	**54 (%24.88)**	**20 (%9.22)**	**10 (%4.61)**

IVELT in the two groups of circumcision age under 7 (mean ± SD 83.9 ± 103.6) and over 7 (mean ± SD 56.5 ± 74.6) was significantly different (p-value = 0.01). It is observed that participants who are circumcised under 7 have a longer intravaginal ejaculation time than those who are circumcised over 7.

As shown in Table 3, the results showed that the difference between PEDT in the two groups of circumcision age under 7 (mean ± SD 11.4 ± 3.4) and over 7 (mean ± SD 11.8 ± 2.7) was not significant (p-value = 0.6). IIEF in the two groups of circumcision age under 7 (mean ± SD 21.8 ± 1.5) and over 7 (mean ± SD 21.4 ± 1.4) was also not significant (p-value = 0.3).

Table 3. Differences between the studied variables in different age groups

Variable	Circumcision Age		
	≤7	>7	P-Value
IVELT	83.9(103.6)	56.5(74.6)	**0.01**
PEDT	11.4(3.4)	11.8(2.7)	0.6
IIEF	21.8(1.5)	21.4(1.4)	0.3

The Spearman correlation test for IVELT, PEDT, IIEF was done and correlation coefficients were -0.23 (Sig. = 0.000), 0.07 (Sig. = 0.26), and -0.07 (Sig. = 0.3) respectively. It can be seen that there is a significant negative correlation between the circumcision age and IVELT. This correlation is weak and means that the amount of IVELT decreases with the increase of circumcision age. The correlations between PEDT and IIEF variables and age of circumcision were not significant.

Thirty-three patients (15.2%) of 217 patients complained of ante-portal premature ejaculation. In these patients, the severity of ante-portal premature ejaculation is parallel to the increasing age of circumcision. Table 4 shows the statics of ante-portal P.E.

Table 4. the statics of ante-portal P.E

Ante-Portal P.e	Number of Patients	Circumcision Age	Circumcision Age Average
Rare	4	5-13	9.25
Sometimes	14	3-13	6.64
Often	11	7-17	11.27
Always	4	9-18	13
Total Patient	33	0-20	8.5

Table 4 shows that an increase in the age of the circumcision increases the severity of ante-portal PE. Thirty-three participants had ante-portal PE, of whom 12 were circumcised before 7 and 21 were circumcised after 7. For the group of under 7, the prevalence of ante-portal premature ejaculation was as follows: Always : (0), Sometimes: 9(75), Often: 1(8.3), and Rare: 2(16.7). For the group of over 7, the prevalence of ante-portal premature ejaculation was as follows: Always: 4(19), Sometimes: 5(23.8), Often: 10(47.6), and Rare: 2(9.5). Ante-portal PE, which is the most severe type of premature ejaculation, has been observed to increase in severity with the circumcision age.

The distribution diagram of the IVELT variables compared with circumcision age is shown in Figure 1.

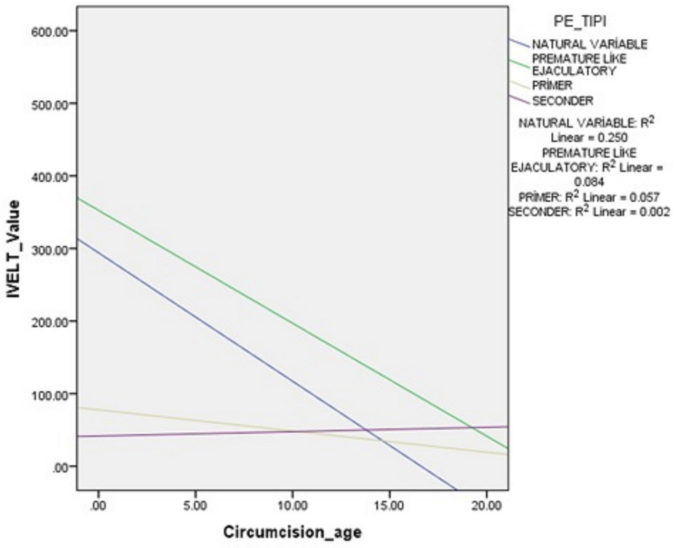

Figure 1. shows that IVELT has the inverse trend toward circumcision age. This means that as the age of circumcision increases, the amount of IVELT decreases.

Discussion

One of the topics that have received less attention in this area is the relationship between circumcision and premature ejaculation. There is no complete agreement in the medical literature about the relationship between circumcision and premature ejaculation[5-7, 12-14]. Some studies have shown that circumcision reduces the prevalence of premature ejaculation [10, 15-21]. Other studies have shown a direct relationship between circumcision and premature ejaculation in men [9, 22-25]. The American Society of Pediatrics, in a self-report, found that circumcised adult men had fewer sexual dysfunctions. However, it also shows that the sensitivity of the penis and the level of sexual satisfaction for circumcised men have decreased [12].

As mentioned, the connection between the two situations has not yet been proven and is disputed. There is also a great deal of disagreement about the appropriate age for circumcision. Some studies support circumcision in the first days of life to prevent urinary tract infections and complications, which are dangerous in infancy [3-5, 12, 13]. Other studies agree with circumcision at an older age and age to prevent the possibility of urethral stricture or foreskin adhesion [6,7, 26].

Yang et al. [27] concluded that circumcision causes orgasm problems in men and their female partners and creates sexual dissatisfaction in them. However, Another study showed that men who were circumcised had more control over their ejaculation and had better IVELT scores than men who were not circumcised [28]. Despite many studies and various results regarding the effect of circumcision on male sexual function, few studies have been performed on the effect of age on circumcision and premature ejaculation.

The present study examines the effects of circumcision age on premature ejaculation in men. The diagnosis of PE was made using the PEDT tool and the official ISSM definition to include 217

participants in this retrospective study. Participants were divided into different categories based on the type of PE. There was a uniform distribution between the groups in terms of demographic characteristics. Participants were then divided into two groups: participants who were circumcised under the age of seven and participants who were circumcised over the age of seven. The premature ejaculation status of both groups was evaluated and compared using PEDT, IVELT, and IIEF. Our results showed that ejaculation time after vaginal penetration, or the IVELT variable, was significantly lower in men who underwent circumcision after seven years. This variable's trend chart clearly showed an inverse correlation between IVELT and age of circumcision. This result indicates that the age of circumcision can be an influential factor in premature ejaculation.

Our study's result is consistent with another study [7], in which it was shown that the prevalence of PE in circumcised boys after 7 is higher than those who were circumcised before 7. The authors of the study suggested that parents circumcise their sons before reaching the age of 7 [7].

Some research has shown that boys may be afraid of circumcision during their Phallic stage (which includes 3-7 years old children) due to the fear of castration [9, 21, 22]. It has been suggested that circumcision should not be performed during this period. Canserver and Gocke [14], in their study, examined 12 boys aged 4 to 7 years before and after circumcision and showed that these boys view circumcision as a harmful surgery for their body and are afraid of castration due to this surgery. In another study [17] author found that boys in Turkey are often circumcised when there is the greatest fear of castration (between 3 and 7 years old).

However, the results obtained in our study are not consistent with these findings. Our study showed that people who underwent circumcision by age 7 had fewer erectile dysfunction and PE problems than those who underwent circumcision after that age. This contradiction can be attributed to Turkey's cultural issues because, in Turkey, circumcision is the entry of a boy into a new phase of sexual life and sexual maturity. Also, in Turkish society, boys who have not been circumcised are considered to be sexually immature. For this reason, it can be considered that they are also subjected to psychological pressure and stress [29]. Some studies have also shown that traditional parties held in Turkey after circumcision can reduce the stress of circumcision [17].

This study showed that circumcision age is an important factor in PE, and more studies should be done in this regard. No studies have conclusively shown that circumcision causes premature ejaculation. However, our results and other studies [11, 24, 25, 27, 28, 30, 31] have shown that the age of circumcision can play a role in premature ejaculation and that circumcision at older ages can increase the risk of PE. Therefore, it is recommended that circumcision be performed before the phallic stage, i.e., before the child is seven years old, to reduce PE's risk as much as possible.

The present study had several limitations. The most important limitation of this article is the absence of a control group. This was because the study was conducted in a culturally restricted environment in Turkey. All men in Turkey are usually circumcised, so there was no uncircumcised person in the study. Also, due to the study's retrospective nature, participants may not disclose the exact date of their circumcision and may report several years less or more. Therefore, more studies are needed with the control group and larger sample size to determine the exact effect of circumcision age on sexual life.

Conclusion

It was concluded that PE is much more common in men circumcised after the age of 7, and the duration of IVELT decreases with the increase in circumcision age. Therefore, it is recommended that children be circumcised as soon as possible and before 7. Also, ante-portal premature ejaculation, which is the most severe type of premature ejaculation, has been observed to increase in severity with the circumcision age.

Conflict of interests
The authors declare that they have no competing interests.

Financial Disclosure
All authors declare no financial support.

Ethical approval
The ethical approval was obtained from the Inonu University Clinical Research Ethical Committee with the protocol number of 2020/168.

References

1. Althof SE, Chris G McMahon, Marcel D Waldinger, et al. An update of the International Society of Sexual Medicine's guidelines for the diagnosis and treatment of premature ejaculation (PE). J Sexual Med. 2014;11:1392-422.
2. Alp BF, Uguz S, Malkoc E, et al. Does circumcision have a relationship with ejaculation time? Premature ejaculation evaluated using new diagnostic tools. Int J Impot Res. 2014;26:121-3.
3. Armagan A, Silay MS, Karatag T, et al. Circumcision during the phallic period: does it affect the psychosexual functions in adulthood? Andrologia. 2014:46:254-7.
4. Aydur E, Aydur E, Gungor S, et al. Effects of childhood circumcision age on adult male sexual functions. Int J Impot Res. 2007;19:424-31.
5. Carson C, Gunn K, Premature ejaculation: definition and prevalence. Int J Impot Res. 2006;18:5-13.
6. Cortés-Gonzalez JR, Jorge A Arratia- Maqueo, Montelongo RM, et al. Does circumcision affect male's perception of sexual satisfaction. Arch Esp Urol. 2009;62:733-6.
7. Cüceloğlu EA, Evren Hoşrik M, Ak M, et al. The effects of age at circumcision on premature ejaculation. Turk Psikiyatri Derg. 2012;23:99-107.
8. McMahon CG, Althof SE, Waldinger Marcel D, et al. An evidence-based definition of lifelong premature ejaculation: report of the International Society for Sexual Medicine (ISSM) ad hoc committee for the definition of premature ejaculation. J Sex Med. 2008;5:1590-606.
9. Serefoglu EC, McMahon CG, Waldinger MD, et al. An evidence-based unified definition of lifelong and acquired premature ejaculation: Report of the second International Society for Sexual Medicine Ad Hoc Committee for the Definition of Premature Ejaculation. J Sex Med. 2014;11:1423-41.
10. Porst H. Burri A. Novel treatment for premature ejaculation in the light of currently used therapies: A review. Sex Med Rev. 2019;7:129-40.
11. Waldinger MD. Premature ejaculation: state of the art. Urolog Clin North Am. 2007;34:591-9.
12. Circumcision A.A.o.P.T.F.o., Circumcision policy statement. Pediatrics. 2012;130:585.
13. Boyle GJ, Goldman R, Svoboda SJ, et al. Male circumcision: pain, trauma and psychosexual sequelae. J Health Psychol. 2002;7:329-43.
14. Cansever G, Psychological effects of circumcision. Br J Med Psychol. 1965;38:321-31.
15. Morris, BJ. Krieger JN. Does male circumcision affect sexual function,

sensitivity, or satisfaction?—a systematic review. TJ Sex Med. 2013;10:2644-57.

16. Ongun S, Dursun M, Egriboyun S. The effect of post-circumcision mucosal cuff length on premature ejaculation. Can Urol Assoc J. 2020;14:309-12.
17. Ozturk OM. Ritual circumcision and castration anxiety. Psychiatry, 1973,36:49-60.
18. Pryor JL, Stanley E Althof, Steidle C, et al., Efficacy and tolerability of dapoxetine in treatment of premature ejaculation: an integrated analysis of two double-blind, randomised controlled trials. Lancet. 2006;368:929-37.
19. Rhinehart J. Neonatal circumcision reconsidered. Transactional Analysis J. 1999;29:215-21.
20. Rosen RC, Cappelleri JC, Smith MD, et al., Development and evaluation of an abridged, 5-item version of the International Index of Erectile Function (IIEF-5) as a diagnostic tool for erectile dysfunction. Int J Impotence Res. 1999;11:319-26.
21. Rouprêt M, Babjuk M, Compérat E, et al. European association of urology guidelines on upper urinary tract urothelial cell carcinoma: 2015 update. Eur Urol. 2015;68:868-79.
22. Serefoglu E, Cimen HI, Ozdemir AT, et al. Turkish validation of the premature ejaculation diagnostic tool and its association with intravaginal ejaculatory latency time. International journal of impotence research, 2009;21:139-44.
23. Serefoglu EC, Yaman O, Cayan S et al. Prevalence of the complaint of ejaculating prematurely and the four premature ejaculation syndromes: results from the Turkish Society of Andrology Sexual Health Survey. J Sex Med. 2011;8:540-8.
24. Sorrells ML, Snyder JL, Reiss MD, et al. Fine-touch pressure thresholds in the adult penis. BJU Int. 2007;99:864-9.
25. Symonds T, Perelman MA, Althof S,et al. Development and validation of a premature ejaculation diagnostic tool. Eur Urol. 2007;52:565-73.
26. Gallo L, Perdonà S, GalloA. EJACULATORY DISORDERS: The Role of Short Frenulum and the Effects of Frenulectomy on Premature Ejaculation. J Sexual Med. 2010;7:1269-76.
27. Yang Y, Wang X, Bai Y, et al. Circumcision does not have effect on premature ejaculation: a systematic review and meta-analysis. Andrologia, 2018;50:e12851.
28. Turunç T, The assessment of Turkish validation with 5 question version of International Index of Erectile Function (IIEF-5). Turk J Urol. 2007;33:45-9.
29. Şahin F, Beyazova U, Aktürk A. Attitudes and practices regarding circumcision in Turkey. Child Care Health Dev. 2003;29:275-80.
30. Waldinger M. Olivier B. Selective serotonin reuptake inhibitors (SSRIs) and sexual side effects: differences in delaying ejaculation. Advances Preclinical Clin Psychiatry. 2000. 1: p. 117-30.
31. Waldinger MD. The neurobiological approach to premature ejaculation. J Urol. 2002;168:2359-67.