

# Improved body cathexis appraisal after circumcision in adult men

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## SUMMARY

There is no published study on the emotional changes following circumcision in adult men. Thus, we aimed to assess the changes in body cathexis appraisal after circumcision for religious reasons in a group of adult men. Forty adult males (mean age 21.4 years) who were circumcised for religious reasons were enrolled in this prospective study. Each patient was asked to fill out a questionnaire of body cathexis appraisal (QBC) consisting of 40 items. A group age-, BMI-, and socioeconomically-matched 40 men who were circumcised in childhood were used as controls. Pre-circumcision and post-circumcision mean QBC scores in the patient group were 150.4 and 164.8, respectively. The control group had a mean QBC score of 161.2. The increase in mean QBC score in the patient group was statistically significant ( $p < 0.001$ ). Similarly, pre-circumcision mean QBC score in the patient group was statistically lower than that of the controls ( $p = 0.017$ ); whereas no significant change was found between post-circumcision mean QBC score and that of the controls ( $p = 0.424$ ). Our findings indicate that adult men who were not circumcised in childhood have diminished body cathexis appraisal than those who were circumcised, and circumcision leads to improvement in body cathexis appraisal.

**Key words:** Adult circumcision, body cathexis

## ÖZET

### Erişkinde sünnet sonrası beden saygısında düzelme

Literatürde erişkin erkeklerde sünnet sonrası görülen ruhsal değişiklikler ile ilgili yayın bulunmamaktadır. Çalışmamızda, erişkinlerde dini nedenli yapılan sünnet sonrası kişisel beden saygısındaki değişiklikler değerlendirildi. Dini nedenlerle sünnet edilen ve yaş ortalaması 21.4 yıl olan 40 erişkin erkek prospektif olarak çalışmaya alındı. Her hastaya sünnet öncesi ve sonrasında 40 soruluk kişisel beden saygı ölçeği (BSÖ) formu dolduruldu. Kontrol grubu olarak, çocukluk çağında sünnet edilmiş, çalışma grubu ile benzer yaş, vücut kitle indeksi ve sosyoekonomik özelliklere sahip 40 erkek çalışmaya dahil edildi. Hasta grubunun sünnet öncesi ve sonrasındaki BSÖ skorları, kontrol grubunun BSÖ skorları ile karşılaştırıldı. BSÖ skoru, hasta grubunda sünnet öncesi ortalama 150.4, sünnet sonrası ise ortalama 164.8 olarak bulundu. Kontrol grubunda ise BSÖ skoru ortalama 161.2 idi. Hasta grubunda, sünnet sonrası toplam BSÖ skorunun, sünnet öncesine göre anlamlı olarak yükseldiği saptandı ( $p < 0.001$ ). Sünnet öncesi toplam BSÖ skoru, kontrol grubundan anlamlı olarak daha düşük bulunurken ( $p = 0.017$ ), sünnet sonrası ile kontrol grubu arasındaki farklılığın anlamlı olmadığı tespit edildi ( $p = 0.424$ ). Çalışma grubumuzda, çocukluk çağında sünnet edilmiş erişkin erkeklerin, sünnetlilere göre benlik saygılarının daha az olduğu ve sünnet sonrası bu farklılığın ortadan kalktığı görülmüştür. Sosyal ve dini nedenlerle erişkin yaşta yapılan sünnet, kişinin özgüvenini kazanmasını sağlayarak ruhsal iyileşmeye de katkıda bulunmaktadır.

**Anahtar kelimeler:** Erişkin sünneti, beden saygısı

## Introduction

Circumcision, a surgical procedure known since ancient times, is performed in many countries due to cultural, religious, or medical reasons; and its frequency is surprisingly high. In the United States, 77 to 85 of every 100 boys are circumcised (1,2). The circumcision rate in newborns has increased in parallel to the increase in the number of hospital delivery. Previous studies have revealed lower frequency of urinary tract infection in circumcised infants compared to those who are not circumcised (3,4), and similarly, lower frequency of sexually transmitted disease in circumcised adults compared to those who are not circumcised has been reported (5,6).

On the other hand, there are conflicting results regarding to the effect of circumcision on the quality of sexual life in men. Several studies have suggested that circumcision leads to diminished penil sensitivity as well as sexual arousal, and therefore, improves ejaculation control (7,8), whereas others did not report such a change in penil sensitivity (9). Besides, patient complaints have led to the application of a surgical procedure to revert circumcision in those who were unsatisfied with being circumcised (10).

Two separate studies evaluating sexual activity in men who were circumcised in adulthood have reported that circumcision *per se* did not alter sexual activity but permitted a retardation in ejaculation time (11,12).

However, despite numerous studies which have reported various results regarding to sexual activity in men circumcised in adulthood, there is no study on the influence of circumcision performed in adulthood on body cathexis appraisal. The present study was designed to prospectively assess the influence of adulthood circumcision on body cathexis appraisal in a group of men.

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## Material and Methods

A total of 40 adult men were circumcised by guillotine method under local anesthesia. Those with penil dermatological disorders such as phimosis, balanitis, or condyloma were excluded. All patients declared that they were not able to have this procedure in childhood due to various reasons, and expressed their willingness to be circumcised due to religious or sociocultural reasons.

All patients were asked to fill out informed consent form and QBCs, which were first developed by Secord and Jourard (13) and subsequently adapted in Turkish by Hovardaoglu (14) (Table I). Patients were asked to score their satisfaction (1 for "none", and 5 for "very satisfied") about 40 different parts of their body, the highest score being 200. The patients who were unable to understand some of the questions were helped by the surgeon.

The pre-and post-circumcision QBC scores as well as total scores of four items related to sexuality were assessed and then compared to those in a group of age-, body mass index-, and socioculturally-matched 40 men who were circumcised in childhood (Mean age at circumcision were 6). Single and married patients were evaluated at the 12th week visits in our clinic, respectively regarding their new penile appearance and sexual activity.

Differences in the QBC scores were analyzed using Mann Whitney U test, whereas pre-and post-circumcision total scores of four items related to sexuality and those in the control group were analyzed with independent variables t test. A p value equal or less than 0.05 was accepted as statistically significant.

## Results

The mean age of the patient group was 21.4 (ranging between 20 to 24) years. All patients were army recruits from East and Southeast Anatolia who were performing their military service in the western part of the country. None, except eight who were married, had a regular sexual life. Eleven patients declared that they had no previous sexual intercourse. Most of them had been raised in large families in distant rural areas and used to work in farms before military service. Unfortunately, education and income levels were very low, which for them, was the main reason for not being circumcised in childhood. The demographical features of both groups are given in Table II.

Circumcision was performed by guillotine method under local anesthesia and all patients were discharged on the day of procedure following coban bandage and were administered prophylactic antibiotics (500

mg ciprofloxacin two times a day) orally for five days. No complication was noted on the 5th day visit.

The mean pre-circumcision QBC score was significantly lower than that in the control group (150.4 and 161.2, respectively,  $p < 0.0001$ ), whereas the mean post-circumcision QBC score was similar (164.8,

**Table I. Questionnaire of body cathexis which were first developed by Secord and Jourard**

Name and surname	:					
Date	:					
		<i>I like so much (5)</i>	<i>I like quite much (4)</i>	<i>Not sure (3)</i>	<i>I don't like (2)</i>	<i>I don't like it at all (1)</i>
My						
Hair	( )	( )	( )	( )	( )	( )
Face	( )	( )	( )	( )	( )	( )
Appetite	( )	( )	( )	( )	( )	( )
Hands	( )	( )	( )	( )	( )	( )
Body hair	( )	( )	( )	( )	( )	( )
Nose	( )	( )	( )	( )	( )	( )
Physical strength	( )	( )	( )	( )	( )	( )
Order of urination and defecation	( )	( )	( )	( )	( )	( )
Muscle strength	( )	( )	( )	( )	( )	( )
Waist	( )	( )	( )	( )	( )	( )
Level of energy	( )	( )	( )	( )	( )	( )
Back	( )	( )	( )	( )	( )	( )
Ears	( )	( )	( )	( )	( )	( )
Age	( )	( )	( )	( )	( )	( )
Chin	( )	( )	( )	( )	( )	( )
Body build	( )	( )	( )	( )	( )	( )
Profile	( )	( )	( )	( )	( )	( )
Height	( )	( )	( )	( )	( )	( )
Sharpness of senses	( )	( )	( )	( )	( )	( )
Resistance to pains	( )	( )	( )	( )	( )	( )
Shoulder wideness	( )	( )	( )	( )	( )	( )
Arms	( )	( )	( )	( )	( )	( )
Chest	( )	( )	( )	( )	( )	( )
Eyes	( )	( )	( )	( )	( )	( )
Digestive system	( )	( )	( )	( )	( )	( )
Appearance of thighs	( )	( )	( )	( )	( )	( )
Resistance to diseases	( )	( )	( )	( )	( )	( )
Legs	( )	( )	( )	( )	( )	( )
Shape of teeth	( )	( )	( )	( )	( )	( )
Sexual power	( )	( )	( )	( )	( )	( )
Feet	( )	( )	( )	( )	( )	( )
Sleep order	( )	( )	( )	( )	( )	( )
Voice	( )	( )	( )	( )	( )	( )
General health	( )	( )	( )	( )	( )	( )
Sexual activity	( )	( )	( )	( )	( )	( )
Knees	( )	( )	( )	( )	( )	( )
Posture	( )	( )	( )	( )	( )	( )
Shape of face	( )	( )	( )	( )	( )	( )
Weight	( )	( )	( )	( )	( )	( )
Appearance of penis	( )	( )	( )	( )	( )	( )

**Table II. The demographical features and body cathexis scores of both groups before and after the circumcision**

	<b>Circumcision group n:40</b>	<b>Control group n:40</b>
Mean age	21.4	22
Place of birth		
Southeast of Anatolia	26	24
East of Anatolia	14	16
Place of living		
Village	28	24
Town	8	10
Big city	4	6
Occupation		
Hard worker	24	18
Farmer	6	6
Other	10	16
Mean number of siblings	9.3	8.5
Education		
Uneducated	16	12
Primary school	24	20
Body Mass Index (min-max)	23.5 (20.2-27)	23 (19.1-25.9)
The mean body cathexis score before circ. (min-max)	150.4 (127-176)*	161.2 (126-193)*
The mean body cathexis score after circ. (min-max)	164.8 (140-188)**	161.2 (126-193)**

\* : The mean pre-circumcision body cathexis score is significantly lower than that in the control group (p<0.0001)

\*\* : The mean post-circumcision body cathexis score was similar with the control group (p=0.424)

p=0.424) (Table III). Following circumcision, total scores of four items related to sexuality increased from 14.40 to 16.65. The respective score was 17.55 in the control group. Our findings indicated that this particular score was significantly lower in the patient group before circumcision, and this difference did no longer exist following the circumcision. Regarding to four sexual items, all scores except for the appearance of thighs (sexual activity, sexual performance, and satisfaction from the appearance of the penis) increased after circumcision. However, this score was not different than that of the controls following circumcision (Table III). Of note, those who were married (8 patients) reported more satisfaction from sexual activity as well as increased frequency of weekly intercourse.

## Discussion

In Turkey, male circumcision is both a religious and sociocultural compulsion. As for the parents and the society, the medical advantages frequently reported in the literature such as decreased prevalence of genitourinary infections, does not represent any significance. The usual time of circumcision is early school ages. However, although being the “prerequisite” for manhood in Turkey (15), circumcision could not be performed at these ages due to low income in most parts of eastern and southeastern Anatolia, most of the young males awaiting to be recruited by the military service until they reach medical attention at the military hospitals. Moreover, it is usually very hard for these men to admit that they are uncircumcised while obtaining past medical history as this is perceived as an “imperfection” or “guilt” by the society.

Not surprisingly, only 14 of the patients were able to admit that he was uncircumcised; 6 out of 8 married patients admitted that they used every means in order to make their spouses not be aware of their being uncircumcised; and 12 out of 32 single patients admitted that they were not allowed to get married, and were unlikely to do so unless they are circumcised.

In this study, we observed that circumcision not only improved body cathexis appraisal but had favorable effects on the attitude of adult men as well. This may best be represented with the encourage of circumcised men to report their health status to the nurses at the outpatient clinic front desk during the 12th week visit.

There are conflicting results about penile sensitivity and the level of satisfaction from sexual intercourse following circumcision. Several studies have reported diminished sensitivity of the glans penis (16,17), whereas others reported a more favorable sexual body cathexis appraisal after circumcision intercourse (9,18). Another study has revealed no difference between quantified somatic glans sensitivity between circumcised and uncircumcised men (19). The results of a more recent study indicate that erectile function and penile sensitivity are diminished but the level of sexual satisfaction is increased in men circumcised for medical reasons (20). Not surprisingly, the patients have uniformly stated that

**Table III: The comparison of the mean sexual domain scores of pre-circumcision, post-circumcision and control group**

<b>Question</b>	<b>The mean pre-circ. score</b>	<b>The mean post-circ. score</b>	<b>Control group</b>	<b>Precirc-control group</b>	<b>Postcirc-control group</b>
Sexual activity	3.40	3.90	4.25	p=0.008	p=0.273
Sexual power	3.40	4.10	4.60	p=0.0001	p=0.022
The appearance of penis	3.65	4.40	4.65	p=0.0001	p=0.221
The appearance of thighs	3.95	4.25	4.05	p=0.732	p=0.486
Total score	14.40	16.65	17.55	p=0.0001	p=0.188

they are now much better satisfied with the appearance of their new penis because of their previous preputial disturbances such as balanitis, phimosis, or chondyloma. Likewise, diminished pain during intercourse as well as improved penil sensitivity despite unaltered erectile function scores in patients with preputial disorders may be attributed not only to the surgical procedure itself but the alleviation of the inflammatory disorder of the penis (21). There is another study which has reported that neither sexual activity nor level of satisfaction were altered following prophylactic circumcision for HIV in over 2000 adult men (22).

In our study, all patients (who did not had any preputial disorder and were circumcised for solely religious reasons) reported "a better looking" penis and this was further documented with the QBC scores. All of the post-circumcision QBC scores, except sexual activity, were found to be similar to the control group, and the reason for this low sexual activity score might be related to the relatively short time (12 weeks) after the surgical procedure.

The dramatic improvement in the body cathexis appraisal that we have observed might be closely related to the cessation of negative feelings about the perception of overall body appearance. Previous studies have demonstrated that body cathexis appraisal is negatively correlated with physical and sexual appeal, sexual activity, frequency of sexual activity, and depression (23).

In our country, men perceive the state of being uncircumcised in childhood as a "misperfection" in their identity and body, therefore leading to disintegration of emotional body cathexis appraisal after circumcision stability and disorders of sexual function (24). This inevitably results in the instinct of "hiding" this personal defect from the spouse, thereby interfering with a normal and healthy sex life of the couples. Thus, one might consider that increased number of sexual intercourse as well as enhanced level of sexual satisfaction is not only related to the new physical appearance of the penis but to the improved body cathexis appraisal and self esteem as well.

In conclusion, circumcision in adulthood substantially improves body cathexis appraisal and this procedure must be considered in adult men who were less fortunate to have this procedure in childhood, particularly in countries like Turkey.

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