

# EVALUATION OF CIRCUMCISION IN TURKEY

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## SUMMARY

**Aim:** The aim of this study is to evaluate the frequency of the circumcision and complications due to this operation on young male starting their military obligation in Turkey and to investigate the performer, the place and the mean age.

**Material and Metod:** This study is a cross-sectional investigation proposed at Armor School and Training Division Command (Etimesgut-Ankara) between 04 and 28 March in 2002. 3625 privates enlisted in the Turkish Army are included in the study. During the general health examination of the participants, two urology specialists performed their urogenital examinations and noted down the results.

**Results:** The mean age of the privates was found  $20.6 \pm 1.4$ . We found that 99.4% of the participants have been circumcised. The average age for circumcision was found  $6.1 \pm 3.2$  years. Only 15.2% of the circumcisions were performed by a surgeon and 83.3% of them were executed at home. 24 participants (0.7%) had minor complications and 4 (0.1%) had major complications. In all the cases with complication, circumcisions were performed neither at a health center nor by a surgeon.

**Conclusion:** The circumcision is a traditional application in a Muslim country like Turkey and performed mainly by traditional practitioners. Therefore, the frequency of acute and chronic complications may increase due to nonphysician operators. It is impossible to give up circumcision in a Muslim population, but unhealthy conditions must be prevented.

**Key Words:** Circumcision, Frequency and Complication

## ÖZET

### Türkiye'deki Sünnet Araştırması

**Amaç:** Bu çalışma askerlik görevine yeni başlayan genç erişkin erkeklerde sünnet olma sıklığının, sünnet olma yaşının, sünnet işleminin yapıldığı yerlerin, sünneti yapan kişilerin ve sünnet komplikasyonlarının saptanması amacıyla gerçekleştirilmiştir.

**Gereç ve Yöntem:** Çalışma 04-28 Mart 2002 tarihleri arasında Etimesgut Zırhlı Birlikler Okulu ve Eğitim Tümen Komutanlığında yürütülen kesitsel tipte bir araştırmadır. Çalışmaya adı geçen birliğe temel askerlik eğitimi almak üzere katılmış olan 3625 erbaş ve er dahil edilmiştir. Bu kişilerin birliğe katıldıkları anda yapılan genel sağlık muayeneleri sırasında iki üroloji uzmanı tarafından ürogenital muayeneleri yapılmış ve sonuçlar kaydedilmiştir.

**Bulgular:** Çalışmaya katılan erbaş ve erlerin yaş ortalamasının  $20.6 \pm 1.4$  olduğu bulunmuştur. Katılımcıların %99.4'ünün sünnet olduğu, ortalama sünnet olma yaşı  $6.1 \pm 3.2$  iken sünnet olanların sadece %15.2'sinin bir hekim tarafından bu işleme tabi tutulduğu ve %83.3'ünde ise işlemin evde yapıldığı saptanmıştır. Diğer taraftan erbaş ve erlerin %0.7'sinde (%0.6) minör %1.1'inde (%0.1) ise majör sünnet komplikasyonu saptanmıştır. Sünnet komplikasyonu saptanan vakaların tamamının hekim dışı personel tarafından ve sağlık kurumu dışında bir yerde sünnet edildiği bulunmuştur.

**Sonuç:** Türkiye gibi Müslüman ülkelerde geleneksel olarak uygulanan sünnet işleminin büyük bir kısmının hekim dışı personel tarafından ve sağlık kurumu dışında bir yerde gerçekleştirmiş olması bu işleme bağlı olarak ortaya çıkabilecek akut ve kronik komplikasyonların sıklığını artırmaktadır. İşlemin sağlıksız koşullarda ve yetkin olmayan kişiler tarafından yapılması önlenmelidir.

**Anahtar Kelimeler:** Sünnet, Sıklık, Komplikasyon

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Although circumcision is not performed always as a treatment method, it is a very common procedure in the world. For example, about %80 of American-born men are circumcised (1). Its benefits are reported commonly such as decreasing of the risk of penile cancer, urinary tract infections and sexually transmitted diseases (2-6). In contrary, others believe that it results in diminished sexual activity and sensitivity of glans (7-9). Some

reported complications due to circumcision are one of the most important arguments against it. Thus performing circumcision is still controversial in modern medical area.

In this study, we aimed to document the frequency of the circumcision and complications due to this operation on young male starting military obligation in Turkey and investigate the person who performed, the place and the mean age of circumcision.

**Table-1:** Status of circumcision

Status of circumcision	Number	%
<i>Circumcised</i>	3602	99,4
<i>Non-circumcised</i>	23	0,6
Total	3625	100,0

**Table-2:** Age of circumcision procedure

Age	Number	%
0	58	1,6
1	219	6,0
2	284	7,9
3	362	10,0
4	258	7,2
5	386	10,7
6	546	15,2
7	390	10,9
8	303	8,4
9	242	6,8
10	248	6,9
11	113	3,1
12	104	2,9
13	29	0,8
14	18	0,5
15	22	0,6
16	5	0,1
17	11	0,3
18	4	0,1
Total	3602	100,0

### Materyal and Metod

This study is a cross-sectional investigation proposed at Armor School and Training Division Command (Etimesgut-Ankara) between 04 and 28 March in 2002. 3625 new recruits who are enlisted in the Turkish Army are included in this study. As a standard procedure, every new recruit is examined when he starts his military obligation. During this general health examination, we included urogenital examination. Two urological specialists performed their urogenital examinations and noted down the results. In addition to this, the recruits were given a questionnaire including 17 questions. This questionnaire included socio-demographical information about privates such as age, marital status, educational status, city of birth, type of family, occupation, etc. In this questionnaire, it is asked whether they were circumcised or not. If they were circumcised, the performer, location and the age of circumcision were noted. All the statistical analyses were realized with SPSS 10.0 (SPSS Inc., Chicago, USA) statistical package

program. Mean $\pm$ sd was used for the descriptive statistics.

### Results

The mean age of the privates was found 20.6 $\pm$ 1. We found that 4.99.4% of the participants have been circumcised (Table-1). The average age for circumcision was found 6.1 $\pm$  3.2 years (Table-2). Only 15.2% of the participants were performed circumcision by a surgeon and 4.4% were performed by other medical person. 80.4% of circumcision were performed by traditional practitioners (Table-3). 521 (14,5%) privates had their circumcision at a health institution but 83.3% of circumcisions were performed at home (Table-4). We observed 28 complications due to circumcision (0.8%), 24 (0.7%) of which were minor complications (Figure-1 and Table-5), whereas 4 (0.1%) were major (Figure-2 and Table-6). Circumcisions were neither performed at a health center nor at a surgeon's office in cases who had complications.

**Table-3:** Person performing circumcision

Person	Number	%
<i>Doctor</i>	547	15,2
<i>Other medical person</i>	158	4,4
<i>Traditional practitioners</i>	2897	80,4
Total	3602	100,0

**Table-4:** Location of circumcision

Location	Number	%
<i>Home</i>	3002	83,3
<i>Health institution</i>	521	14,5
<i>Others</i>	79	2,2
Total	3602	100,0

**Table-5:** Minor complications due to circumcision

Complication	Number
<i>Aesthetic problems</i>	8
<i>Incomplete circumcision</i>	6
<i>Keloid formation</i>	4
<i>Intradermal mass</i>	3
<i>Penile adhesion</i>	3
Total	24

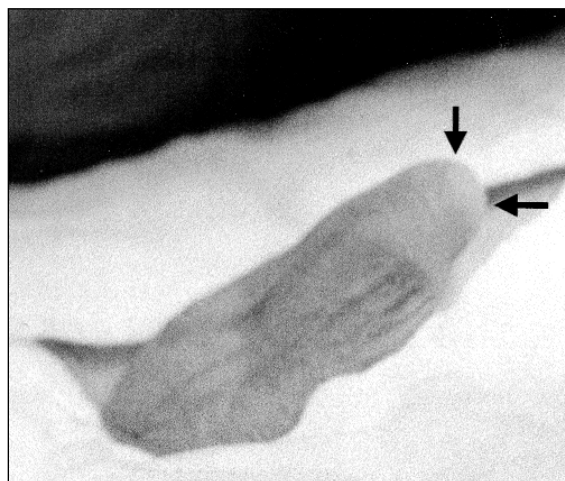
**Table 6-** Major complications due to circumcision

Complication	Number
<i>Partial glanular amputation</i>	2
<i>Hypospadias</i>	1
<i>Penile curvatur/chordee</i>	1
Total	4

**Figure-1:** Minor complication due to circumcision (incomplete circumcision)

### Discussion

Circumcision has been described since antiquity (10). The practice of circumcision is thought to be at least 15.000 years old, but its origin and medical history are not well known. It is generally performed for religious grounds, medical necessity such as phimosis, recurrent

**Figure-2** Major complication due to circumcision (partial glanular amputation)

balanitis, or aesthetic appeal (10). In the United States it is practiced virtually universally. Also there are some who accept circumcision as a preventive measure for carcinoma of the penis, carcinoma of the cervix, urinary tract infections, and sexually transmitted diseases (11).

There are a lot of circumcision techniques such as dorsal slit, Shield method, Sleeve method, and clamp methods (Gomco clamp, Sheldon clamp, Plastibell clamp, Winkelman clamp, Tara clamp, Yellen clamp, Bronstein clamp etc.). Whatever a surgeon chooses a technique for circumcision, the aim of circumcision is the same: To excise sufficient foreskin to leave the glans uncovered. Guillotine method, which is not included in classic textbooks, is one the most commonly performed method for circumcision. In this method, the glans is fixed with fingers, and a clamp is placed on prepuce carefully. After the removal of the skin above the clamp, mucosa and submucosa are sutured. Despite it is not clear; we think that Guillotine method is the most commonly performed method for circumcision in Turkey.

Whether it is done for ritual, traditional or medical reasons, circumcision remains the most common operation performed on males worldwide. In Turkey as a Muslim country, the

basic reason for circumcision is religious grounds and circumcision is performed as a religious ceremony. Approximately, 800.000 male children are born each year in Turkey and 95% of them are Muslims (12). Thus circumcision is one of the most commonly performed procedures in Turkey. In Muslim countries like Turkey circumcision is generally undertaken by a person who is not medically trained. We think this creates the main reason for complications of circumcision. As circumcision is generally carried out by unqualified traditional practitioners, variable circumcision characteristics cannot be determined easily. The person who perform the operation, a physician or a traditional circumciser, may affect their health as well.

Military duty is obligatory for every male in Turkey and all males are examined before starting Military obligation in a routine fashion. We conducted our study in this group. In our study, we determined that only 15.2% of the participants were circumcised by a surgeon. Another important finding is that 83.3% of them were executed at home instead of a medical institution. In Turkey most of Muslim boys generally undergo circumcision before puberty. Supporting this situation, we found the average age of performing circumcision as about 6 years. In contrast to America and Europe countries, where circumcision is performed in the neonatal period, it is performed at older ages in Turkey, and timing may affect the psychosocial well being of males.

Despite the fact that circumcision is a relatively simple operation, complications can occur ranging from trivial to tragic. The argument against circumcision is based on the surgical complications of this intervention in children. Many complications due to circumcision have been cited in different reports. Complication rate

after circumcision is reported to be 0.2-5% in the literature (2,13). Reported complications after circumcision include hypospadias, glanular amputation, urethral fistulae, penile adhesions, keloid formation, haemorrhage, meatal stenosis, infection, incomplete circumcision, penile oedema, urinary retention, gangrene of the penis and intradermal mass (13,14,15). Latifoglu et al. found that urethral fistula formation was the most common complication of circumcision (12). In his series, medically unqualified traditional itinerant circumcisers caused 92.5% of the complications. In our study, we found the most common complication of circumcision as aesthetic problems. 24 (0.8%) minor and 4 (0.1%) major complications were noted. In all the cases with a complication, circumcisions were neither performed at a health center nor by a surgeon. Penile amputation at any level is rare but it is the most seriously reported complication of circumcision (16,17). We determined 2 partial glanular amputation in our series. To prevent these complications, practice of any surgical operation by unqualified practitioners should be abandoned and significant punishment should be considered.

### Conclusion

Circumcision is usually a simple and safe intervention with minimal complication if performed correctly. Most complications result from unqualified non-physician persons. To give up the circumcision is impossible in a Muslim population; but we should prevent unhealthy conditions during this procedure. Ideally, each male planning to undergo circumcision should be evaluated beforehand by medically trained professionals and circumcision should be carried out in aseptic conditions at a medical center by surgeons.

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