

# Artificial Penile Nodules: a Case Series of Three Patients

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## Abstract

Artificial penile nodules are inert objects inserted beneath the skin of the penis. Objects placed underneath the skin of the penile shaft may include plastic beads made from toothbrushes, silicon, metal pellets, glass, ivory, precious metals, marbles or pearls. The penile bead implantation is performed largely due to the belief that it will enhance sexual performance and pleasure of female or male sexual partners during intercourse.

In this article, three cases with artificial penile nodules made of toothbrushes and dice are presented. All three men have implanted foreign bodies underneath the dorsal aspect of the penile skin during their prison stay and implantations were not followed by any side effects. However, insertion of foreign bodies may be followed by early and late complications and transmission of blood-borne viruses.

Penile implants are important for dermatological consideration, because they make condom use more difficult and may represent a risk factor for sexually transmitted infections.

## Key words

Penis; Foreign Bodies; Body Modification, Non-Therapeutic; Sexual Behavior

Artificial penile nodules are inert objects inserted beneath the skin of the penis. Objects placed underneath the skin of the penile shaft may include plastic beads made from toothbrushes, silicon, metal pellets, glass, ivory, precious metals, marbles or pearls (1). The penile bead implantation is performed largely due to the belief that it will enhance sexual performance and pleasure of female or male sexual partners during intercourse (2). Historically, most reports on penile implantation of foreign bodies originate from North and Southeast Asia (2, 3). The occurrence of this phenomenon is much less common in non-Asian groups, but it has been reported in Romania (4), among Fijians (5) as well as Russian immigrants in Israel (6). However, it has also been reported in Western Europe (7) and in the USA (8).

Herein, three patients with artificial penile nodules are reported. All of them were referred to the City Institute for Skin and Venereal Disease in Belgrade due to some other skin or venereal complaints.

## Case reports

### Case 1

A 28-year-old man presented with folliculitis unrelated to artificial penile nodules. Physical examination accidentally revealed 5 asymptomatic penile nodules, four of them on dorsal part of the penis and one at the prepuce edge (Figure 1). Careful personal history gave insight into the etiology of nodules. These were capsule shaped artificial self-implanted plastic pearls, inserted two years ago by piercing the penile skin with a sharp iron rod, without a local anesthetic.

The beads were made from a toothbrush by using sandpaper. The patient was in prison at that time, and suffered no serious side effects after insertion. The aim was to enhance the patient's sexual pleasure and the pleasure of his sexual partners.



**Figure 1.** Case 1: four capsule shaped penile implants on the dorsal aspect of the penis; the fifth pearl is implanted at the edge of the prepuce

### Case 2

A 30-year-old man was referred to our Institute for routine screening for sexually transmitted infections. The examination showed an oval, hard, subcutaneous nodule on the dorsal aspect of the prepuce. The overlying skin was normal, and the nodule moved freely with preputial retraction (Figure 2). No other abnormalities were found in the genital region and the regional lymph nodes were not enlarged. All performed laboratory tests were negative for venereal diseases. Further questioning showed that the foreign body was self-implanted while he was in prison five years before. The implant was made from plastic (toothbrush) in the same way as in the previous case. The implantation was not followed by any side effects.

### Case 3

A 21-year-old man visited a dermatologist because of genital warts. Physical examination revealed two small, skin colored, fleshy warts on the dorsal aspect of penis. A hard, mobile nodule was noticed below the

warts on the penile shaft. It was a self-made small niche made with a sharp spoon, two years before when he was in prison. According to the patient's description, the procedure was a little painful with slight bleeding. A pyramid-shaped foreign body made from a dice, by rubbing it against the concrete, was pushed under the penile skin. Before insertion the patient cleaned the implant with an "after-shave" lotion. The implant moved freely under the skin (Figures 3a and 3b). The healing occurred within days without any adverse events. He noticed that his girlfriend was much more stimulated during intercourse since he inserted "a dolphin" under the penile skin.

### Discussion

The phenomenon of penile bead implantation is not uncommon in other cultures, but is new and rather peculiar in our society. In this paper we present three Serbian ex-prisoners with self-made artificial penile nodules.

The origins of the custom of inserting penile implants, especially among prisoners, dates back to



**Figure 2.** Case 2: an oval hard nodule on the dorsal part of the penile shaft



**Figure 3a.** Case 3: a pyramid-shaped foreign body (with a pyramidal basis) beneath the penile skin. Genital warts are above the implant.



**Figure 3b.** Case 3: the penile nodule has turned, so the top of the pyramidal base is beneath the penile skin

the 18<sup>th</sup> century in Japanese gangsters, members of the criminal organization Yakuza (3), who practiced it to demonstrate their loyalty to the clan (9).

Several case reports and studies of prisoners and ex-prisoners worldwide, suggest that this population gradually adopted the practice (7, 8, 10). However, the practice has also said to be more common among seamen, soldiers, drug addicts and those with lower socioeconomic backgrounds (6, 7, 11).

Data regarding the prevalence of this phenomenon vary among different cultures. Serour in his study reported the prevalence of 0.63% among Russian immigrants who participated in a circumcision program in Israel (6). In the study of Tsunenari et al, 22% of prisoners in Japan had penile implants and most of them belonged to the Yakuza organization (3). A study conducted in Taiwan among male heroin abusers has shown that 40% of respondents had artificial penile nodules (11). Among one hundred young amphetamine users in Thailand, Thomson et al, found that 51% had penile modifications, the most common being inlaying with muk(s) in 61% (12).

Implants are made from different materials – plastic, metal, glass, ivory, silicon, wood, marbles and

pearls. In Japan, implants are called “Tancho nodules” after glass bottles of popular “Tancho” Japanese hair pomade, either melted or polished which is used to smooth beads for implantation (13). Other terms for insertion are “fang muk” in Thailand, China, Singapore, Malaysia, Vietnam and Cambodia; chagan balls in Korea; bulleetus in Philippines, penis marbles in Fuji, “goli” in India and RuJu in Taiwan (5, 11, 14, 15). Artificial penile nodules in our country are called “dolphins”.

In prison, the beads are made out of spoons, toothbrushes, dominoes, chopsticks, melted toothpaste tube caps, buttons or deodorant roller balls (3, 16, 17). Outside the prison, there are glass balls, pearls or precious stones being used for implantation (3). Our two patients made implants from toothbrushes and the third patient made it from a dice. By making, polishing and subcutaneously inserting penile beads in the foreskin, prisoners combat prison boredom and provide income from selling and inserting finished implants to other prisoners (18).

Implantation procedures in prison are usually performed under primitive conditions without using anesthesia and antiseptics. The procedure of bead

implantation is simple. The penile skin is penetrated with a sharp pointed object (a ballpoint pen, sharpened piece of plastic, iron rod, spoon, knife or razor), and the foreign body is pushed under the penile skin through the small incision (1). Implants may be inserted at different parts of the penis, but the dorsum is the most common site (2), as described in our cases.

The penile shaft is covered by thin and very mobile skin. The loose adherence of the skin to the underlying tissues allows insertion of implants and accounts for their mobility within the subcutaneous layers. Once implanted the bead, becomes movable underneath the penile skin during intercourse.

Though the prevalence of complications during implantation of penile implants seems to be low, the true incidence and severity of early or delayed complications are probably underreported (1). One study has shown that 96.6% of sixty interviewed implant bearers had no complications even eight years after implantation (19). On the other side, early complications, including penile erythema and edema, inflammation, infections and abscesses were reported by others (8, 10, 19).

Penile implantation may certainly increase transmission of hepatitis B virus, hepatitis C virus and human immunodeficiency virus (HIV). Insertion of penile implants in prison, without proper measures of protection against infection (lack of sterile instruments, sterile gloves, use of shared and inadequately cleaned incision instruments and exposure to other's blood), is associated with several potential risks such as getting infections at the site of insertion with blood borne viruses.

Among male heroin users in Taiwan, penile bead implantation, called RuJu, was an independent risk factor (OR=2.47, 95% CI 1.40, 4.36,  $p<0.01$ ) for HIV infection (11). This could be explained by facts that having implants underneath the penile skin may dissuade bearers from using condoms, because the fixed beads would lead to painful intercourse, or condom failure. Moreover, beads may cause abrasion of male or female genital organs. Lesions of genital mucosa may be sites for HIV entry. On the other hand, sharing instruments used for implant insertion, medical complications during bead implantation and condom leakage are risk factors for HIV transmission (11, 16).

However, other complications of penile insertion, such as superinfections, rejection, functional impotence,

urethral stenosis, sepsis and well-differentiated squamous cell carcinoma of the penis, have been reported (7, 20). The female sexual partners of men with artificial penile nodules reported dyspareunia, bleeding and injuries of vagina and cervix, which also put them at risk for sexually transmitted infections (18).

The reasons for penile foreign body implantation are certainly manifold and culture related. Some do it because of peer influence or as a symbol of affiliation to a certain group, others as a symbol of manhood and potency, or even on demand from a female partner, but in majority of cases because of the belief that beads will produce more friction during sexual intercourse and enhance sensuality and sexual pleasure (10, 15, 21).

The diagnosis is usually straightforward, and the hardness of the implanted beads is pathognomonic. These objects are usually palpable as non-tender, hard subcutaneous nodules and when followed with details from the patient's history, should pose no diagnostic problem for dermatologists. However, these may cause diagnostic confusion in certain patients if they are associated with genitourinary complaints.

Even in our country, all physicians must be familiar with this practice when assessing certain groups of men. Penile implants are important for dermatologists and venereologists, because these make condom use more difficult and may represent a risk factor for sexually transmitted infections.

## Conclusion

To the best of our knowledge, these cases are the first men reported with penile implants in Serbia.

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## Abbreviations

HIV - human immunodeficiency virus

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## Arteficialni penilni nodusi: prikaz tri slučaja

### Sažetak

Uvod: Arteficialni penisni nodusi su inertni objekti koji se postavljaju ispod kože penisa u cilju povećanja seksualnog zadovoljstva kako osobe koja ih je implantirala, tako i njenih budućih seksualnih partnera. Objekti koji se postavljaju pod kožu su obično od plastike, silikona, metalnih loptica, stakla, drveta, mermera ili dragocenih metala.

Prikaz sučaja: U radu prikazana tri pacijenta koji su tokom boravka u zatvoru pod kožu dorzalne strane penisa sami implantirali strana tela koja su napravili od plastike držača četkica za zube i od kockice za jamb. Proces implantacije je prošao bez neželjenih efekata.

Diskusija: Iako ni u jednom od tri prikazana slučaja nije bilo neželjenih efekata, poznato je da se posle

intervencija ove vrste mogu razviti rane i kasne komplikacije. Takođe je poznato na osnovu slučajeva objavljenih u svetskoj literaturi, da postoji povišeni rizik za prenošenje virusa hepatitisa i HIV-a tokom ove prakse.

Pacijente prikazujemo sa ciljem da dermatovenerologe upoznamo sa ovom praksom koja je sve više prisutna i u našoj sredini, kao i sa problemima koje ona nosi, kao što je, između ostalog, otežana upotreba kondoma tokom seksualnih odnosa, što vlasnike implantata dovodi u povećani rizik za polno prenosive infekcije.

Zaključak: Na osnovu podataka iz nama dostupne literature, tri slučaja opisana u ovom radu predstavljaju prve slučajeve arteficialnih penisnih implantata u Srbiji.

### Ključne reči

Penis; Strana tela; Telesna modifikacija, neterapijska; Seksualno ponašanje