Treatment of Penile Entrapment
Not Only Remove But Escharotomy: A Case Report

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The leading causes of externally applied foreign body are eroticism or foreign body may cause impairment of penile circulation resulting in severe complications such as penile amputation. This patient’s penis was nearly necrotic owing to the externally applied neck of a PET bottle. Fortunately, through emergent escharotomy accompanying with removal of the foreign body the penis was saved from amputation. Although it needed skin grafts to reconstruct skin defect, the sexual intercourse wasn’t affected.

Key words: penis, foreign body, PET bottle, escharotomy, skin grafts

Some male adolescents place foreign body externally on the penis for the purpose of masturbation of eroticism\(^1\). Unfortunately, the constriction around penis caused by a fixed foreign body always leave some sequelae. It leads to strangulation and infarction of penis. We report a case of penile entrapment in a PET bottle neck whose penile tip showed severe cyanosis when arrives in the hospital. Although it was removed, a circle of necrotic skin was still choked the circulation. However, emergent escharotomy saved it from amputation.

Case Report

A 24-year-old unmarried male patient presented with the penis entrapped in a neck of PET bottle for 8 hours. He placed the bottle on his penis for erotic purpose. Unfortunately, it couldn’t be taken off due to increasing rigidity and engorgement. He cut off the bottle from the connection between neck and body, the neck of the PET bottle was left in place. At the time of presentation in emergency room, his penis was engorged, cyanotic and a circle of skin necrosis distal to the neck. The glans penis also showed impending necrosis.

He was sent to operating room for removing the foreign body, and escharotomy was performed in the mean time. Three days later, the partial impending necrosis of glans penis was turned to pink. However, the skin of penile shaft could not be preserved. The necrotic skin was completely taken off after twice debridement. The mucosa of glans penis wasn’t excised despite of existed superficial necrosis. It was healed by secondary intention. Split thickness skin graft was used for the reconstruction of skin defect of penile shaft.

The patient was followed up in 6 months. There were not any problems of erection and intercourse.

Discussion

The first case of a foreign body externally applied to the penis was reported in 1755 by Gauthier\(^2\). Penile entrapment is a serious urologic emergency, as it can lead to strangulation and infarction. Most of patients will seek for medical help as they...
Fig. 1  The penis was firmly stuck in a neck of PET bottle. The skin distal to the foreign body showed necrosis. The glans penis was congested, cyanotic and impending necrosis.

Fig. 2  Three days after escharotomy. The congestion improved, circulation of glans penis returned.
Fig. 3  Seven days after escharotomy. The glans penis was saved from complete necrosis. There was only a small area of superficial necrosis which was completely healed by secondary intention.

Fig. 4  Ten days after escharotomy. The circulation of penis was reestablished. Skin defect of penile shaft needed skin grafts.
cannot take off the constricting agents. The outcome of most cases were good, and left no complications.

The effects of penile entrapment depend on the interval of foreign body attached to the penis. Although gangrene has been reported, it is uncommon. Because each corpus cavernosum has an individual artery, and the thickness of Buck’s fascia and corporeal tissue resists pressure on the deep vessels. The symptoms will disappear after the foreign body is removed. Unfortunately, in this case the skin of encircling site had been necrosis owing to the prolonged pressure. The necrotic skin strangulated the penis like a tourniquet. If it was not relieved, further necrosis would be occurred.

In the case, escharotomy restored the circulation distal to the encircling site. The accurate decision of escharotomy prevented the penis from amputation. Although there was partial penile skin necrosis, the corpus cavernosum was survival. Skin grafts were used for skin defect reconstruction. And the patient doesn’t have any problems of sexual intercourse in his sexual life thereafter.

**Conclusion**

Penile entrapment by foreign body is a urologic emergency. The foreign body should be removed as early as possible. As cyanotic congestion of glans penis is presented, it is better to do escharotomy. Split-thickness skin graft doesn’t affect penile erection in the sexual life.

**References**

陰莖異物嵌入的治療
移除異物合併痂皮切開術：病例報告

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在陰莖套上異物，大部分的動機都是為了性慾或自慰，但若因異物卡住而造成血液循環不良，會導致陰莖截肢的嚴重後果。本病例因寶特瓶瓶頭部卡住陰莖而造成陰莖幾乎壞死，幸好及時施行痂皮切開術而挽救了陰莖，雖然需要植皮重建，但並不影響性交。

關鍵詞：陰莖，異物，寶特瓶，痂皮切開術，植皮