

Our experience in the diagnostics and treatment of closed injuries of the penis

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This article describes the clinical case of rupture of the corpora cavernosa of the penis and of the urethra. The algorithm of diagnostic and therapeutic measures is described.

Key words: *penis, gap, corpora cavernosa, urethra.*

Fracture of the penis (corpora cavernosa rupture) refers to the section of emergency conditions in urology, and is described very detailed and repeatedly by various authors. This situation might perhaps be attributed to the «evil joke of nature» – because in order to ruptured tunica albuginea, a man must have perfect erection. Also some sexual positions are marked, which result most often in injury – primarily a «woman on top», although quite regularly injury occurs when erected penis is turned on the crotch or perineum of partner. Most often there is a rupture of one of the corpora cavernosa, rarely – associated injuries of both corpora cavernosa and urethra. Also isolated lesions of the urethra are described [2].

The clinical picture of this condition is typical: after direct exposure on the penis the patient feels a sharp pain, the erection disappears, penis becomes bigger due to the subcutaneous hematoma; leakages can spread to the abdomen, thighs, scrotum and perineum. When trauma is combined with urethral injuries: urethrorrhagia, acute urinary retention, and urinary leakages [1].

Diagnostic algorithm includes: a survey, palpation, when involvement of the urethra is suspected – ascending urethrography is made. As far as possible – ultrasound assessment of injury field and Doppler of penile blood vessels is recommended.

Surgical activity, in our opinion, in this situation is completely justified. There is need of revise of the place of rupture, drainage of hematomas, suturing the gap, urinary derivation when urethra is injured. In the department of sexology and andrology of Institute of Urology NAMS of Ukraine during the period from 01.01.2010 to 31.12.2014 there were 11 patients with closed injuries of the penis. Nine of these patients had rupture of the tunica albuginea of one the corpus cavernosum; 2 patients had rupture of the tunica albuginea of 2 corpora cavernosa, and one patient had combined rupture of the tunica albuginea and urethra.

We would like to submit to your attention two clinical cases, which are different from the typical penile «fracture» and successfully cured due to active surgical tactics.

Patient P., 33 y.o., enrolled after 10 hours from trauma with specific complaints and clinical picture (photo 1).

While revision big hematoma was found (photo 2).

Rupture of both corpora cavernosa was found (forceps is inserted in the gap of tunica albuginea) – photo 3.

Place of rupture is found on the right side from urethra – photo 4.

Visualization of the gap of tunica albuginea – photo 5.

Postoperatively, we could see the recovery of spontaneous erections at 3rd day after surgery. The wound healed

good with primary intention. After discharge, the patient did not referred again.

Patient K., 46 years old, was admitted 12 hours after injury. Against the background of typical complaints there was urethrorrhagia. Before referring to the Institute of Urology patient was examined in the local urology department, where, without an ascending urethrography, permanent urethral catheter was set (photo 6). Surgical intervention was proposed.

By ultrasound the rupture of tunica albuginea in the proximal third, partly in the middle segment, starting with the outer surface of the right cavernous body, moving to the inner surface of the right cavernous body, surrounded with avascular hematoma 2.7 to 3.0 cm, was found. Cavernous artery were visualized: in the left corpus cavernosum all along and on the right cavernous body – just in the distal segment (photo 7).

While revision hematoma was drained – photo 8.

Visualization of tunica albuginea and urethral rupture – photo 9.

Urethral rupture is closed – photo 10.

The gap in tunica albuginea is also sutured – photo 11.

The trocar cystostomy is made. In the postoperative period – the recovery of spontaneous erections was after 6 hours.



Photo 1



Photo 2



Photo 4



Photo 3



Photo 5

Wound was healed with primary intention. A month after the intervention, before removing of cystostomy, antegrade voiding cystourethrography was performed by the multidetector computer tomography (photo 12).

During voiding urethra was contrasted evenly: bladder neck was 1.1 cm, prostatic part was 0.8 cm, membranous part

up to 0.9 cm, the hanging part of the urethra to 0,45 cm (defined restriction up to 3 cm length) further to 0,95 cm. In order to prevent the formation of urethral stricture patient received conservative treatment. Cystostomy drainage was moved away. The patient is now followed up, urination and sexual function are fully restored.



Photo 6



Photo 8



Photo 9

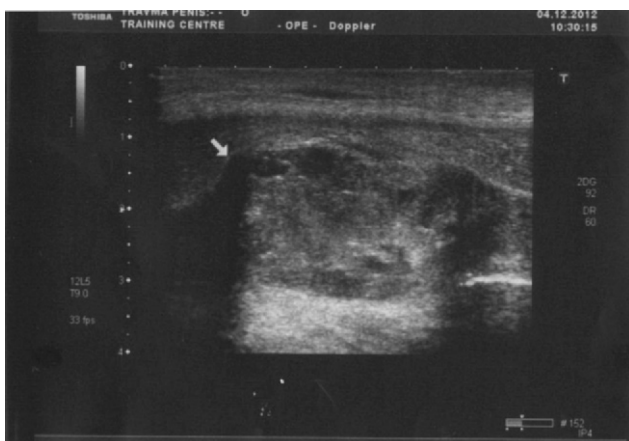


Photo 7



Photo 10



Photo 11



Photo 12

Conclusions

1. The full implementation of diagnostic algorithms in managing of penile closed injuries allows maximally predict the need and extent of surgery

2. Active surgical tactics allows to discover more full and repair the damage and, thus, to improve the long-term results of treatment.

Наш опыт диагностики и лечения закрытых повреждений полового члена

А.М. Корниенко, М.Г. Романюк, П.В. Аксенов, В.В. Билоголовская, Н.А. Степаненко

В статье описаны клинические случаи разрывов кавернозных тел полового члена и мочеиспускательного канала, приведен алгоритм диагностических и лечебных мероприятий.

Ключевые слова: половой член, разрыв, кавернозные тела, уретра.

Наш досвід діагностики та лікування закритих ушкоджень статевого члена

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У статті описані клінічні випадки розривів кавернозних тіл статевого члена і сечівника, наведено алгоритм діагностичних та лікувальних заходів.

Ключові слова: статевий член, розрив, кавернозні тіла, уретра.

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СПИСОК ЛИТЕРАТУРЫ

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|---|--|--|
| 1. Возіанов О.Ф., Люлько О.В. Урологія. Видання друге, перероблене і доповнене. Дніпропетровськ – РВА – «Дніпро-VAL». – 2002. – С. 367. | чин Д.Ф. Выбор тактики оказания помощи больным с закрытыми повреждениями полового члена // | Здоровье мужчины. – 2009. – № 1. – С. 81–82. |
| 2. Костев Ф.И., Рясный А.В., Ту- | | |

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