A 28-year-old male patient presented to our ED with a GSW (gunshot wound) by a handgun to the left inguinal area. PE revealed bruising and swelling over the left hemiscrotum, and the entrance wound penetrating wounds 1x0.5 cm over left suprapubic area to the exit wound 1x0.5 cm left hemiscrotum. Bedside Scrotal DUSS revealed a hyperechoic hematoma in the left testis and preserved vascular flow of both testes. Emergency pelvic CT revealing left scrotal sac partial rupture of the lower pole of left testis, and preserved integrity of intrapelvic solid organs. The patient underwent hemiscrotum exploration surgery and laceration wound repairmen. Fortunately, the left hemiscrotum tunica albuginea and the seminiferous tubules were intact without ruptured. Postoperative duplex ultrasound scanning (DUSS) showed viable testis without atrophic changes and demonstrated a good arterial blood flow. The patient was discharged and keep clinic follow-up without complication.

Gunshot penetrating trauma wound injuries to the male external genitalia is rare in Taiwan due to relatively smaller affected incidence compared to other site of whole body. Early diagnosis and management is important in ED. Doppler ultrasonography scan (DUSS) is a good tool for emergency physician in today's society with increasing gunshot violence. GSW should receive more attention by emergency physician in today's society with increasing gunshot violence. 

Gunshot wound injury to the external genitalia, although rarely life-threatening, demand early approach and appropriate management to prevent sexual days function and long-term psychological damage. Injuries to the scrotum and contents may cause impaired fertility.

Hypogonadism and altered self-image. Penile injuries may lead to erectile dysfunction and urethral stricture. Bedside scrotal DUSS is a good tool for emergency physician with high sensitivity in the detection of intra-scrotal lesion as a good mode for differentiating testicular from paramesopic lesions with acute scrotal complaints and blood flow status. Delayed management has a high risk of complications such as infection, testicular atrophy due to poor blood flow of the affected. In conclusion, early diagnosis and proper treatment for GSW and external genitalia are critical in emergency department to the prevention of additional complication and poor prognosis.

References


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Fig. 1. One gunshot wound from left suprapubic area over left scrotum. Left testicle ecchymosis swelling over left spermatic cord.

Fig. 2. Coronal Pelvic CT reveals 4.4x3.3cm hyperdense hematoma in left scrotal sac and partial rupture of the lower pole of left testis and tear of anterior lower scrotal wall.