Scrotal dog bite and mismatch between the skin and testis injury: a case report and review of literature

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Dog bite injury to the genitalia is a rare condition, regarding which most of the studies have focused on prevention of infection and management of severe cases; and small, superficial lacerations have not been taken into consideration. We present a case of a patient whose testis was severely injured with minimal scrotal injury and without significant clinical findings other than pain. We found two other case reports with similar features during review of the literature. We suggest that in case of genital dog bite, regardless of the lesion size and appearance, imaging is necessary to make sure that the testes, corpus cavernosum, and urethra are intact.

Keywords Bites and stings; Male genitalia; Scrotum

INTRODUCTION

A dog bite is not an uncommon situation; however, it is considered to be a rare accident if it occurs in the genital area. Several case reports have discussed the infectious and physical aspects of severe dog bite injuries in the genitalia; however, some unresolved issues about the minor injuries still remain. In this case report, we aim to emphasize the importance of attention to minor genitalia injuries caused by dog bites.

CASE REPORT

A 40-year-old male patient who was bitten by a stray dog in the scrotum presented to the emergency department. At initial evaluation, we observed four small lesions on the right side of the genitalia, two spot-sized superficial injuries on the penile skin, a 1-cm injury at the peno-scrotal junction, a 5-mm rupture on the slightly larger right hemi-scrotum (Fig. 1). On palpation,
the left side was normal while the right side was mildly tender, and larger than the other side. The clinical findings did not reveal much, so we decided to do an ultrasound scan of the scrotum.

An ultrasound examination revealed a normal left testis and a hyperechoic and heterogeneous right testis with a mild hydrocele and a ruptured tunica albuginea (Fig. 2).

Since the tunica albuginea was ruptured, we explored the scro-

Fig. 1. Minimal scrotal injury after dog bite, wherein the spots of injury are marked by arrows. The patient agreed to the publication of his medical information and photographs for the advancement of medical science under the condition of anonymity.

Fig. 2. Ultrasound image of hyperechoic and heterogeneous right testis after dog bite injury (A) compared to the normal left testis (B). The patient agreed to the publication of his medical information and photographs for the advancement of medical science under the condition of anonymity.

Fig. 3. Bivalved testis due to dog bite injury. The upper and lower borders of the tunica albuginea rupture are marked by arrows, and protruded testis parenchyma through the large tunica defect is visible. The patient agreed to the publication of his medical information and photographs for the advancement of medical science under the condition of anonymity.

Fig. 4. Repaired testis after scrotal dog bite injury. Suture line is marked by arrows. The patient agreed to the publication of his medical information and photographs for the advancement of medical science under the condition of anonymity.
should be assessed in cases with small penile lacerations using urine analysis, retrograde urethrography or urethroscopy, and penile sonography.4,5

In conclusion, due to the high power of the dog’s jaws and the puncturing nature of the dog bite, we recommend that even small and apparently superficial genital lacerations caused by dog bites should be examined carefully. An ultrasound examination of the scrotum is recommended for the evaluation of tunica albuginea. A penile ultrasound may be helpful for detecting tunica albuginea injury of the corpus cavernosum; and urine analysis, retrograde urethrography, or urethroscopy may be helpful for urethral assessment. Thus, early diagnosis can decrease the complications of dog bites of the genitalia.

**CONFLICT OF INTEREST**

No potential conflict of interest relevant to this article was reported.

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