



Case Report

Traumatic testicular dislocation

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Abstract

Traumatic testicular dislocation is rare; it sometimes may be overlooked due to serious associated injuries. In this report, we had 2 cases of traumatic testicular dislocation which presented in different situations.

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Introduction

Traumatic testicular dislocation is a rare clinical entity that occurs after blunt scrotal injury⁽¹⁻⁵⁾. The mechanism is direct pressure on the scrotum that causes the testis to be propelled outside the scrotal sac⁽¹⁾. Early recognition and prompt treatment is important in order to preserve testicular function.

We report 2 cases of traumatic testicular dislocation with different presentations and different treatment results.

Case report

Case 1

A 34-year-old man came to the emergency unit with an injury from motorcycle collision with a pick-up truck. An initial survey revealed hypovolumic shock from the fracture of the right superior pubic rami, left inferior pubic rami, and right femur (Figure

1). Foley catheter was indwelled and showed gross hematuria.

Whole abdominal CT and CT cystogram were performed, revealing no other abdominal organ injury and no contrast leakage from the bladder (Figure 2). He was admitted to the orthopedic unit for treatment of his bone injuries. Two weeks after admission he complained that he had lost his right testis. He stated that he had had normal descended testes before the accident. On his physical examination, empty right hemiscrotum, ecchymosis and swelling of the right groin were found (Figure 3). Previous CT was reviewed and revealed that the right testis was located at the right superficial inguinal area (Figure 2).

Right side inguinal exploration was performed and only the destroyed nubble of the right testis was found (Figure 4), right orchidectomy was done.

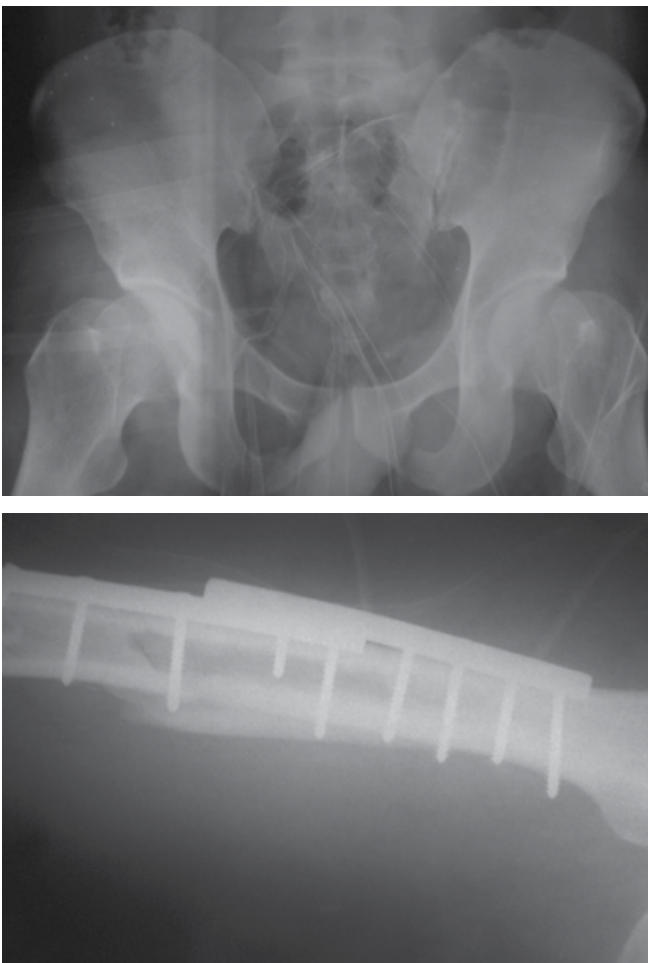


Figure 1. Fracture right superior and left inferior pubic rami and right femur.

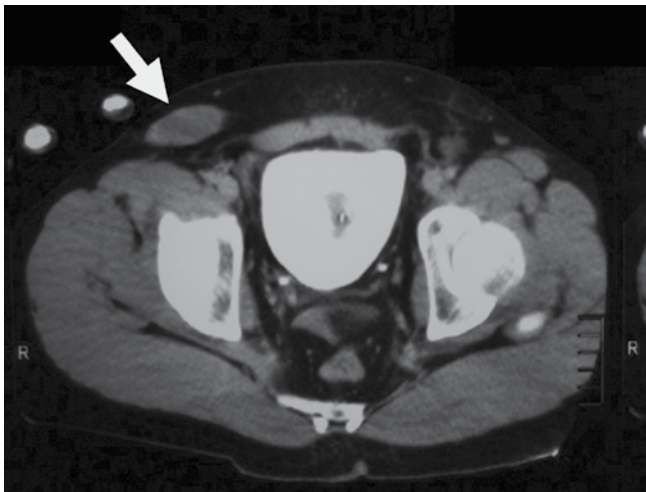


Figure 2. CT cystogram revealed no contrast leakage from the bladder and the right testis (arrow) was found at the superficial inguinal area.



Figure 3. Empty right hemiscrotum and ecchymosis and swelling of the right groin.



Figure 4. Right testis.

Case 2

A 17-year-old motorcyclist came to the emergency unit due to a motorcycle collision with the trunk of a car. He suffered from only a laceration wound at his right forearm, but he complained of an abnormal mass at his left groin, which occurred after the accident. Physical examination revealed a mass at the left groin and the left hemiscrotum was swollen and empty (Figure 5). He denied a history of cryptorchidism and stated that both of his testes had been located in the normal position before the accident.



Figure 5. Empty left hemiscrotum and mass at the left groin.

He was sent to the operating room, inguinal and scrotal exploration was performed. The left testis was found in the superficial inguinal area. It had a normal appearance, no hematoma, but its covering fascia was torn away (Figure 6).



Figure 6. Left testis was located in the superficial inguinal area.

The left testis was pushed into the left hemiscrotum and orchidopexy was performed with 3-point fixation. Follow-up examination at the 2-week period was normal (Figure 7).



Figure 7. The left hemiscrotum at the 2-week post operative period.

Discussion

Traumatic testicular dislocation is an uncommon event that can occur after blunt scrotal injury⁽¹⁻⁶⁾. Motorcycle accident is the most common cause of injury^(1,2). The most common site of dislocation is the superficial inguinal area^(1,2). The factors that contribute to testicular dislocation are direct force against the testis, cremasteric reflex, wide-open superficial inguinal ring, concomitant indirect inguinal hernia, and atrophy of the involved testis^(1,3).

The diagnosis of traumatic testicular dislocation may be overlooked by physicians or patients due to other serious concomitant injuries^(1,3,4). Sometimes it is misdiagnosed or unattended due to the rarity of the injury^(1,3,4). Physical examination may reveal an empty hemiscrotum or a palpated abnormally located testis⁽¹⁻⁵⁾. CT scan or ultrasonography can reveal an abnormally located testis⁽¹⁻⁶⁾.

Once testicular dislocation is diagnosed, early treatment should be instituted in order to prevent deleterious effects on testicular function or orchidectomy. Although manual reduction of the

dislocated testis can be performed, it has a high failure rate and other testis injuries or epididymis might be overlooked⁽⁵⁾.

The authors present 2 cases of testicular dislocation that presented due to different situations with different treatment results. The first patient presented with severe injury from trauma. Diagnosis and treatment of testicular dislocation were delayed even after a CT scan of the whole abdomen was performed at the time of injury. Treatment was orchidectomy due to the involved testis being found as only a piece of tissue. The second case came with only an abrasion after a motorcycle accident. The patient recognized that he had an abnormal mass at the groin. Immediate exploration was performed and the testis was preserved.

Conclusion

Traumatic testicular dislocation is a rare complication after blunt trauma. Knowledge of this rare injury, careful examination, and a high index of suspicion must be instituted in order to prevent delayed diagnosis that could lead to poor treatment results.

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