A Case of Idiopathic Spontaneous Intratesticular Hemorrhage

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A 21-year-old man presented with acute-onset left lower abdominal pain that had initially developed 8 hours earlier. He was not given any medication including anti-coagulants. He denied trauma. On palpation, the left testis was slightly swollen and showed tenderness. The suspected diagnosis was testicular torsion, and surgical exploration was indicated.

On visual inspection, the whole testis was black. The spermatic cord was neither distorted nor black. Testicular torsion could not be completely ruled out; thus, left orchiectomy was performed. Histopathology revealed diffuse intratesticular hemorrhage without the necrosis of seminiferous tubular cells. We encountered a case of idiopathic spontaneous intratesticular hemorrhage.

Introduction

Testicular hemorrhage usually results from trauma or malignancy. We encountered a very rare case of idiopathic spontaneous intratesticular hemorrhage.

Case presentation

A 21-year-old man presented with acute-onset left lower abdominal pain that had initially developed 8 hours earlier. He had a previous history of infantile asthma. He was not given any medication including anti-coagulants. He denied trauma. Physical examination was almost negative for the chest and abdomen. He had not shown signs and symptoms of mumps such as fever and parotitis. Plain abdominal CT indicated left testicular swelling. Reduction of blood flow was suspected by Doppler ultrasonography, but the findings were inconclusive. On palpation, the left testis was slightly swollen and showed tenderness. Prehn sign was negative. The right testis was normal. The suspected diagnosis was testicular torsion, and surgical exploration with possible left orchiectomy was indicated. The complete blood count showed leukocytosis (WBC 15,100/μL, Hb 15.1 g/dL, Plt 21.4 × 10^4 μL).

Urinalysis, blood chemistry including CRP (<0.01 mg/dL), and coagulation were normal.

On visual inspection, the whole testis was black. The spermatic cord was neither distorted nor black (Fig. 1). Testicular torsion could not be completely ruled out; thus, left orchiectomy was performed. The bell clapper deformity potentially predisposing to testicular torsion was not identified. Histopathology revealed diffuse intratesticular hemorrhage without the necrosis of seminiferous tubular cells.

Discussion

Idiopathic intratesticular hemorrhage was first described in 1941. Since then, only a few cases have been reported. The final pathological diagnosis was often made after orchiectomy. It has been reported to be difficult to differentiate idiopathic intratesticular hemorrhage from testicular tumor, and ultrasonography can be useful in the diagnosis. In the present case, the distinction between intratesticular hemorrhage and testicular torsion was significant, but ultrasonography was not decisive for the diagnosis. Therefore, surgical examination was inevitable. The hypothesis that contralateral orchitis induced by unilateral testicular injury potentially leads to male infertility is still controversial.
On inspection under direct vision, testicular necrosis was not excluded as the whole testis looked completely black, and removal of the left testis was conducted. Ovesen et al. reported a case of idiopathic spontaneous testicular hemorrhage whereby the hemorrhagic testis was preserved based on sonographic findings. On retrospective analysis, testicular biopsy and rapid pathological examination should have been performed during the operation in the absence of concrete evidence of torsion of the left spermatic cord. The normal color of the left spermatic cord in this case suggests that it was not testicular torsion.

**Conclusion**

We encountered a case of idiopathic spontaneous intratesticular hemorrhage. There is still difficulty in diagnosing and judging how to preserve the affected testis.

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**Conflicts of interest**

None.

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