A 12-Month-Old Infant With Fournier Gangrene Associated With Varicella

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Abstract: Fournier gangrene is a progressive infection of the genital and perianal regions. It is a truly rare entity in association with varicella. There is only a single case published in the literature. We present the second case of a Fournier gangrene associated with varicella in an infant.

Key Words: pediatric fournier gangrene, varicella, scrotal abscess

Fournier gangrene is a progressive infection of the genital and perianal regions. It is distinguished by a necrotizing fasciitis that involves small subcutaneous vessel thrombosis and the eventual development of gangrene.[1–5] It is an uncommon disease in the pediatric population but a truly rare entity in association with varicella. There is only a single case published in the world literature.[1] We present the second case of a Fournier gangrene associated with varicella in an infant.

PRESENTATION AND MANAGEMENT

Case

A 12-month-old male infant without previous history of clinical relevance started 6 days previous to his admission with dermatosis suggestive of varicella. Four days after the dermatosis breakout, he presented with enlargement of the left inguinoscrotal region, accompanied with fever, irritability, and hyporexia. At this point, the patient was brought to our institution for medical attention. At physical examination, the scrotum was notably increased in volume, punctuated at the left inguinoscrotal area, as well as the base of the penis. A pale necrotic area 4 × 3 cm at the scrotal base and 2 × 2 cm toward the left superior medial region (Fig. 1A) was noted. There was no fetid odor at the moment of examination. Laboratory examinations showed leukocytosis 19,000 and temperature of 38.8°C. A genital ultrasound reported soft tissue edema. Antibiotic treatment was started with clindamycin, ceftriaxone, and dicloxacillin while he was immediately taken to the operating room where extensive debridement of the necrotic area was made (Fig. 1B). During the procedure, there was no purulent material obtained, but the necrotic area was sent for culture where *Enterococcus faecalis* and *Acinetobacter lwoffi* were found. There was no apparent damage to the spermatic cord or the testicle. The patient had a satisfactory intrahospital stay with continued antibiotics and frequent gauze change (Fig. 2A), being discharged after 8 days with this same management. The wound healed completely by second intention in 8 weeks (Fig. 2B). Today, the patient is asymptomatic and in good health.

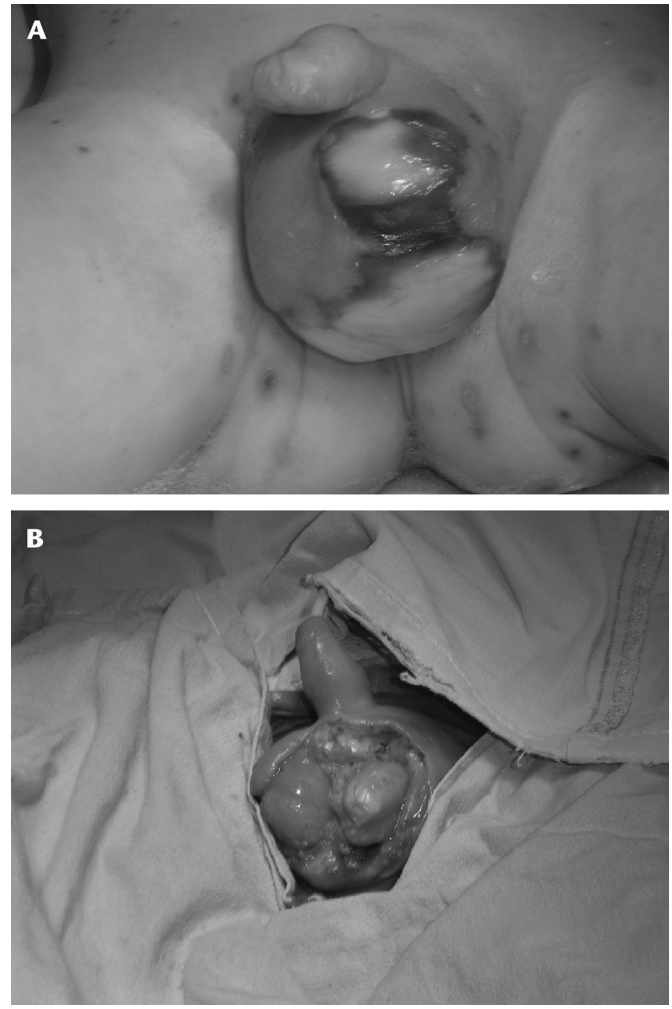

FIGURE 1. Clinical presentation at the emergency room (A). After surgical treatment (B).

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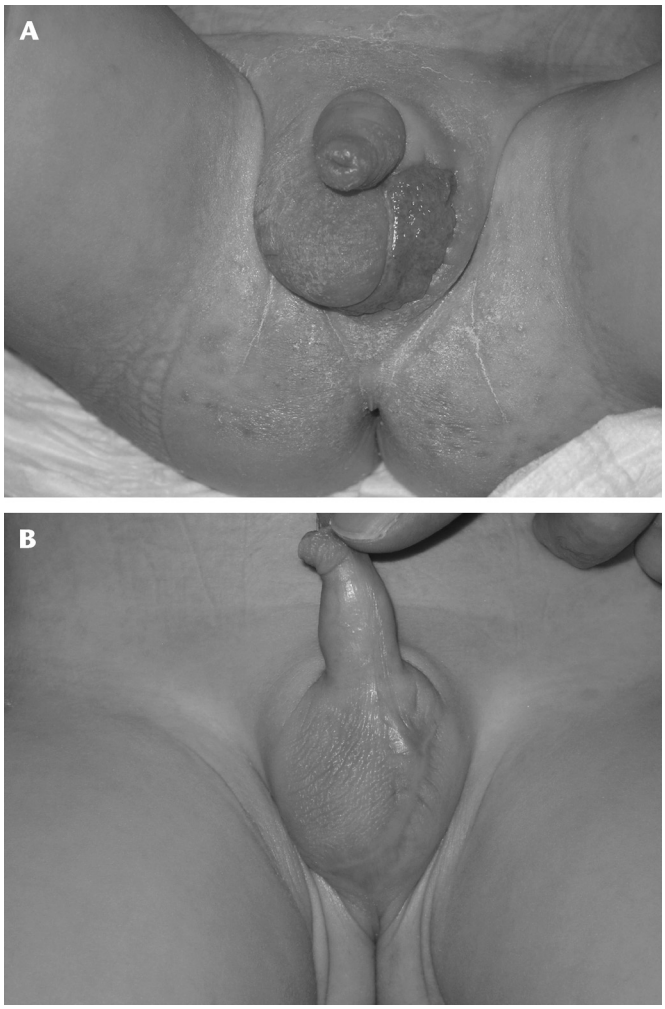

FIGURE 2. The wound after 2 (A) and 8 (B) weeks.

DISCUSSION

Fournier gangrene is a rare infection during childhood. The etiology in children may be due to trauma, insect bite, systemic infection, or burns.[1] The most frequent infectious agents found in this age group are streptococcus and or staphylococcus.[1,5] The lower extremities have been described as the most commonly affected areas in necrotizing fasciitis associated with varicella.[1] There are reported cases of fasciitis associated with varicella in patients younger than 3 months, but there is only 1 published case in relation to the genital area.[1] Treatment must be aggressive with triple antibiotic regimen and debridement in the operating room.[1–5]

The probable etiology in this patient was due to the burst varicella vesicles forming ulcerated lesions that were infected by autoinoculation of the patient when he scratched the affected area and/or contamination with feces in the diaper. There was no need to apply a skin graft in this patient because it healed adequately by second intention.

Fever after the onset of varicella disappears in 48 hours, so if it persists, an alternate focus of infection should be ruled out.[1]

Fournier gangrene is a disease that requires immediate medical attention with antibiotic therapy and debridement of the affected area.[1–5] Although children do not present such a devastating clinical course as adults, where mortality could rise up to 67%, it is important to establish a quick and prompt diagnosis to start adequate treatment.[1,3,5]

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