

# Fournier Gangrene

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**Figure.** A draining lesion in his left inguinal region with surrounding induration and cellulitis extending onto his perineum with enlarged, edematous scrotum.

A 51-year-old male with hepatitis C and a history of intravenous (IV) drug use presented to the emergency department, reporting one day of worsening scrotal pain and swelling. He denied diabetes, trauma, or infection with HIV. His genitourinary examination revealed a draining lesion in his left inguinal region with surrounding induration and cellulitis extending onto his perineum. His scrotum was enlarged, edematous, and tender with a distinct region of ecchymosis (Figure). A calculated Laboratory Risk Indicator for Necrotizing Fasciitis (LRINEC) score was 7, indicating a moderate risk for necrotizing soft tissue infection (NSTI).<sup>1</sup> Shortly after

**Table.** Laboratory Risk Indicator for Necrotizing Fasciitis Score

Variable	Value	Points
C-Reactive Protein (mg/L)	< 150	0
	≥ 150	4
WBC (cells/mm <sup>3</sup> )	< 15	0
	15-25	1
	> 25	2
Hemoglobin (g/dL)	> 13.5	0
	11-13.5	1
	< 11	2
Serum sodium (mmol/L)	≥ 135	0
	< 135	2
Serum creatinine (mg/dL)	≤ 1.6	0
	> 1.6	2
Plasma glucose (mg/dL)	≤ 180	0
	> 180	2
<b>Risk</b>	<b>Probability</b>	<b>Total Score</b>
Low	< 50%	≤ 5
Moderate	50-75%	6-7
High	> 75%	≥ 8

arrival, the patient was transferred to the operating room for surgical debridement, where the diagnosis of Fournier's gangrene was confirmed.

Fournier gangrene is a rapidly-spreading NSTI of the perineum causing fascial and subcutaneous tissue destruction, with mortality rates of 17% to 34%.<sup>2</sup> Risk factors for NSTIs and Fournier gangrene include diabetes, IV drug use, trauma, recent surgery, immune suppression (e.g., cirrhosis or malignancy), peripheral vascular disease, and morbid obesity.<sup>2,3</sup> Fournier gangrene is classically associated with ecchymotic changes, edema, erythema, and drainage from wounds. These findings, however, tend to

arise late in the disease process. Early indicators that must heighten a clinician's suspicion include severe genital pain and tenderness in the absence of external signs.

Multiple laboratory markers have been suggested as useful in diagnosing NSTIs.<sup>1,4</sup> The LRINEC score (See Table) is a weighted point system of such markers often used to stratify patients into low, moderate, or high risk for NSTIs.<sup>1</sup>

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