

## New prognostic factors in Fournier's gangrene: A 10-year experience

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### Abstract

**INTRODUCTION:** Fournier's gangrene is a rapidly progressing infection of the male genitalia, including the anal and perianal region and usually extending to the abdominal wall. The objective of the present investigation was to study the epidemiologic and clinical reports of patients with Fournier's gangrene in order to evaluate the prognostic factors of the disease. **METHODS:** The patients were referred to Ghaem hospital from 1998-2008. Their files were reviewed for: (1) laboratory parameters of urea, creatinine (Cr), hematocrit (Hct), white blood cell (WBC), albumin (Alb), sodium (Na), Calcium (Ca), and potassium (K); (2) probable risk factors (eg, diabetes); (3) ulcer microbiology; and (4) the extent of the gangrene. **RESULTS:** There were 71 patients with a mean age of 60.9 years (SD = 17.02). The time between onset of symptoms and referral to a health care unit was 6.7 days (SD = 0.20). The source of infection was the skin in 20 patients (28%), urogenital in 34 patients (48%), and rectal in 17 patients (24%). The anorectal source was responsible for 11 out of 16 deaths. Diabetes was a predisposing factor in 39.4%. The patients were divided in 2 groups: the survival group (n = 50) and the mortality group (n = 16). The survival group had a significantly higher socioeconomic status, shorter mean time between the onset of the illness and referral to a health clinic, lower percentage of gangrene involvement, fewer required debridements, and higher mean Alb and Ca and lower mean urea laboratory values (P < .05). There were no other significant between-group differences for the remaining variables. **CONCLUSIONS:** The authors compared the data in the present study with data from the Laor Fournier's Gangrene Severity Index. None of the conventional indices (temperature, heart rate, respiratory rate, Hct, Cr, WBC, Na, K) were found to be significantly different when the mortality and survival group were compared in the present study. The authors recommend new prognostic criteria for Fournier's gangrene: (1) time between onset of the symptoms and referral to the hospital; (2) source of infection; (3) extent of the gangrene; (4) laboratory results of Alb, urea, and Ca; and (5) the number of required debridements. © 2019 UroToday International Journal.

### Reaxys Database Information

### Author keywords

Fournier's gangrene; Laor Fournier's gangrene severity index; Prognosis; Risk factors

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