

Editorial referring to the paper published in this issue on pp. 331–334

URINARY TRACT INFECTIONS

Towards zero mortality in Fournier's gangrene

Bolesław Kuzaka, Bartosz Dybowski

Department of Urology, Medical University of Warsaw, Warsaw, Poland

The authors present a retrospective analysis of their 20 patients treated for Fournier's gangrene (FG) within three years in one urological department. This is the largest series known to us collected during 3 years in a single institution [1]. However, to give a reference scale, authors should have presented data on the total number of hospital admissions per year as well.

Looking at the clinical data one may be surprised with a number of ablative procedures. With six orchiectomies (30%) and three penectomies (15%) this group represents one of the highest rates reported in contemporary literature (Table 1). Orchiectomy should be carried out only if a testicle is involved in the necrotic process and its vitality is questioned. Severe infection of the peritesticular tissues does not always correspond with the involvement of the testis [2] so that the ablative surgery is rarely justified. Decision however depends on the experience of a surgeon. Fournier's gangrene involving penis to the extent that penectomy

has to be performed is extremely rare in our experience and in other series (Table 1). Even cases with severe necrosis of penile skin usually may be treated with repeated debridement [3], so we consider three partial penectomies is this material as a high rate.

On the other hand, in contrast to Katib and other authors we are creating suprapubic percutaneous cystostomy as standard when treating patients with significant defects of skin in genital area.

In a brief review of recent FG series presented in Table 1 one can find that types of procedures used and results of treatment vary significantly between the centers. The highest rate of orchiectomies and penectomies present Katib and coworkers. In the same time they acquire 0% mortality, the best result of all studies cited.

Of course differences in FG definition, case severity and experience of surgical and medical teams also affect the outcome. Nonetheless effect of surgical aggressiveness should be investigated further.

Table 1. Procedures accompanying FG debridement and mortality rates in contemporary series

	Country	N	Orchiectomy	Penectomy	Cystostomy	Colostomy	Mortality
Katib A et al. [1]	Saudi Arabia	20	30%	15%	5%	0%	0%
Sugihara T et al. [4]	Japan	379*	10.8%	8.8%	11.5%	17.1%	
Vargas AH et al. [5]	Columbia	42	9.5%	2.4%	62%	14.3%	17%
Kuo CF et al. [6]	Taiwan	44	2.3%	2.3%	2.3%	4.6%	22.7%
Koukouras D et al. [7]	Greece, Germany	45**	26.7%	0%	37.8%	55.5%	15.6%

* Data from Japanese urological departments, **data from three departments

References

1. Katib A, Al-Adawi M, Dakkak B, Bakhsh A. A three year review of the management of Fournier's gangrene presenting in a single Saudi Arabian institute. *Cent Eur J Urol*. 2013; 66: 336–340.
2. Yanar H, Taviloglu K, Ertekin C. Fournier's gangrene: risk factors and strategies for management. *World J Surg*. 2006; 30: 1750–1754.
3. Życzkowski M, Bogacki B, Bryniarski P, Nowakowski K, Muskała B, Paradysz A. Gangrene of the penis, scrotum and perineum, occurred after radiotherapy of rectal cancer. *Cent Eur J Urol*. 2013; 66: 336–340.
4. Sugihara T, Yasunaga H, Horiguchi H, Fujimura T, Ohe K, Matsuda S, et al. Impact of surgical intervention timing on the case fatality rate for Fournier's gangrene: an analysis of 379 cases. *BJU Int*. 2012; 110: E1096–1100.
5. Vargas AH, Carbonell J, Osorio D, García HA. Evaluation of Fournier's necrosis in a high complexity hospital. *Arch Esp Urol*. 2011; 64: 948–952.
6. Kuo CF, Wang WS, Lee CM, Liu CP, Tseng HK. Fournier's gangrene: ten-year experience in a medical center in northern Taiwan. *J Microbiol Immunol Infect*. 2007; 40: 500–506.
7. Koukouras D, Kallidonis P, Panagopoulos C, Al-Aown A, Athanasopoulos A, Rigopoulos C, et al. Fournier's gangrene, a urologic and surgical emergency: presentation of a multi-institutional experience with 45 cases. *Urol Int*. 2011; 86: 167–172. ■

Correspondence

Dr. Bolesław Kuzaka M.D., Ph.D.
bolkuz@interia.pl