



Donovanosis in developed countries: neglected or misdiagnosed disease?

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**INTERNATIONAL JOURNAL OF STD & AIDS. 2003 Apr;
14 (4): 288-9**

Sir: In the review article on donovanosis¹ and in the relevant comment of Dr Gupta² the authors presented data about the prevalence of Granuloma Inguinale (GI) in different regions of the India. In the developed countries the cases of GI are extremely rare but maybe underestimated³⁻⁶.

In this time of rapid communications and transport the number of Human Mobile Population (HMP) is increasing every year and the United Nations Population Division has estimated that the number of HMP in the world will rise to one billion people in 2017. There is a possibility that in the developed world some cases of GI in HMP are not identified by clinicians inexperienced in tropical diseases, or that they are treated – and accidentally cured – through a specific use of antibiotics, which are more and more often self-administered. As a matter of fact the *Calymmatobacterium granulomatis* is responsive to a number of common use antibiotics⁸.

In order to evaluate the prevalence of GI in our hospital we conducted a retrospective analysis of clinical records of patients attending the Department of Preventive Medicine for Migrations, Tourism and Tropical Dermatology, which offers treatment and assistance to an underprivileged population in Rome (Italy).

The clinical records of all patients with a definite diagnosis of GI, over a 108-month period (January 1993 – December 2001), were reviewed. Records were identified by a computer-assisted search of the anatomic pathology and medical microbiology laboratory records. Of the 13 records identified 10 were males and six of the 13 cases (46.1%), an unusually high percentage, were observed in the years 2000 and 2001. In all patients the clinical presentation was genital ulceration in ano-genital area (penis, gland, anal canal, vulva) and tests for treponemas, *Chlamydia trachomatis*,

Haemophilus ducreyi, Koch bacillus, herpes simplex virus type 1 and herpes simplex virus type 2 were negative. HIV-1 antibodies were detected in three men and none in the women. The following information was extracted from the records: age, parity, marital status, residence, nationality, date of the last trip in endemic zone for GI, site of lesions, clinical presentation, duration of complaints, investigations, treatment and follow-up. A definite diagnosis of GI was made both by obtaining tissue smears and staining through a Rapi-Diff Giemsa test and/or by obtaining biopsy specimens that were fixed in formalin and sections stained with Giemsa and Warthin-Starry silver stains to detect characteristic Donovan bodies^{9,10}. The majority, 10 (77%) were in the age range 18-38. An estimation of the incubation period was not possible because many patients denied recent sexual intercourse or had long-standing ulceration. Nine (69.2%) patients were from rural areas and in the majority of cases, 11 patients (84.6%), the ulcers had appeared after a trip in the origin countries. Hypertrophic ulcers were much less common than the ulcero-granulomatous variety that represents the majority of ulcers diagnosed, 18 (85.7%) and all the ulcers were only in the genital area.

In conclusion, this study confirms our clinical impression of the increasing prevalence of GI and probably of other tropical diseases in the developed countries, especially among migrant and poor people living in big Western metropolis. Future public health policies all over the world will need to take into careful consideration the changed perspectives of the incidence and prevalence of some tropical diseases in the developed countries. Moreover particular attention should be given to improve access to sexually transmitted disease services providing treatment and counselling for migrants people especially if illegal.

References

O'Farrel N. Donovanosis: an update. *Int J STD AIDS* 2001; 12: 423-7.

Gupta S, Kumar B Donovanosis in India: declining fast? *Int J STD AIDS* 2002; 13: 277-8.

Schulte JM, Martich FA, Schmid GP. Chancroid in the United States 1981-1990: evidence for underreporting of cases. *MMWR* 1992; 41: 57-61.

Di Carlo RP, Armentor BS, Martin DH. Chancroid epidemiology in New Orleans men. *J Infect Dis* 1995; 172: 446-52.

Hacker P, Fisher BK, Dekoven J, Shier RM. Granuloma inguinale: three cases diagnosed in Toronto, Canada. *Int J Dermatol* 1992; 31: 696-9.

Batter V. Trends in HIV seroprevalence among patients with sexually transmitted diseases in 17 European sentinel networks, 1990-1996. *AIDS* 2000; 14: 871-80.

WHO: The World Health Report 2000. Health systems: Improving Performance, Geneva, 2000.

World Health Organisation. Guidelines for Sexually Transmitted Infections Surveillance. World Health Organisation and Joint United Nations Programme on HIV/AIDS, 1999.

Carter JS, Kemp DJ. A colorimetric detection system for *Calymmatobacterium granulomatis*. *Sex Transm Infect* 2000; 76: 134-6.

O'Farrel N. A rapid staining technique for the diagnosis of granuloma inguinale (donovanosis).
Genitourin Med 1990; 66: 200-1.