

### CASE REPORT

## **Bacterial Endocarditis Following Genital Piercing**

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# ABSTRACT

We report a case of bacterial endocarditis resulting from genital piercing in a male patient with known prior valvular heart disease. Body piercings have emerged as a fashion trend among teenagers and young adults. Concurrently, the number of complications related to body piercing has risen, alerting doctors and wearers to safety concerns. The potential risks of regional complications in male genital piercings (e.g. irritation, paraphimosis, priapism, rupture of of the urethra, urethral stenosis, infections, and obstruction of urinary flow) are underestimated by the wearer. Bacterial endocarditis with genital piercing is a severe severe complication arising after the implantation of these accessories. Recognizing symptoms early and providing medical treatment is crucial to minimize morbidity and mortality of bacterial

Keywords: Body piercing; Genital piercing; Bacterial endocarditis; Mitral valve

#### INTRODUCTION

Body piercings have gained popularity among young people and received social acceptance within the last years.

The Kama Sutra, believed to have been written between the first and sixth centuries B.C., describes genital piercing as a way to achieve sexual enhancement [1]. This ornamentation is considered to stimulate the female partner's Gspot and increase the male partner's genital sensitivity [1]. While piercing supporters deem this procedure to be innocuous, literature has shown that it is a risk-taking behavior [2-3]. Due to the increasing number of people wearing body piercings, several medical complications have been reported [2-3].

The authors hereby report a case of bacterial endocarditis after male genital piercing.

#### CASE REPORT

A previously healthy, non-STD infected 36-yearold single male, was referred to the urology service at Coronel Mota Hospital in Roraima State, Brazil due to microscopic hematuria and fever of unknown origin lasting more than 30 days.

His background clinical history included a genital piercing placement 40 days prior to presentation, 3 kg weight loss in 30 days, and treatment by a pediatric cardiologist for heart murmur in childhood. Physical examination

showed fair general condition, fever (38 °C), prostration, tachycardia (heart rate = 110 bpm), pale skin, erythema of oral cavity and buccal mucosa, and systolic murmur in the mitral area. The male genital examination revealed pierced and adorned scrotum (piercings) with regional signs of inflammation, but no subcutaneous crackles (Figure 1). No changes in the testicular or epididymal morphology were noted on palpation. Laboratory evaluation demonstrated infectious blood count (WBCs: 14,000, basophils: 2%, neutrophils: 68%), C-reactive protein: 5.0 mg/dl (normal range 0-1 mg/dl), urinalysis with micro-haematuria, hemosedimentation velocity (HSV): 35 mm/h (0-15 mm/h) and S. aureus-positive blood culture (methicilin sensitive). Transesophageal echocardiography confirmed the clinical diagnosis of bacterial endocarditis by detecting multiple vegetative lesions in the mitral valve. Patient had genital piercings removed followed by antibiotic therapy with oxacillin 2 g IV every 4 hours (by 6 weeks) and gentamicin 80 mg IV 8 hourly (by 5 days). He was discharged from the hospital within 12 days and peripheral venous access for prolonged antibiotic treatment was maintained for six weeks. During follow-up care with cardiology, he had no complications.

#### DISCUSSION

Body piercing is a form of aesthetic adornment which is widely practiced and socially accepted Conflict of Interest: None declared

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**Figure 1:** Genital piercing (hyperemia of the scrotal skin)



today [3]. Most wearers are young people encouraged to express themselves as part of a ritual change of status or even as a permanent body modification [4].

Piercing placement is mostly performed in department stores, jewelry shops and tattoo studios, where proper prophylactic measures such as antibiotic and antiseptic standards are not often adhered to. The Brazilian health authorities have not yet issued any specific safety and hygiene regulations for professional piercers.

That somehow makes access to information more difficult when any complications occur from improper piercing technique.

Infectious complications from body piercing may therefore prove to be harmful and even fatal to a given recipient [5], especially those at high risk for CVD and people with immunocompromised conditions.

Hence, people who undergo a piercing procedure should be advised about the risks associated with these body adornments.

In recent years, a literature review shows an increase in publications on this topic [6-8]. What strikes us is that most articles reported bacterial endocarditis associated with different areas of the body that are commonly pierced (tongue, ear, navel), but few are related to the genital region [6-7]. To our knowledge, this is the first case of bacterial endocarditis following scrotal piercing in Latin America to be reported in the literature.

The importance of this report is to alert healthcare providers not to exclude bacterial endocarditis in patients with persistent fever after piercing placement and inform vulnerable patients about the risks of body modification.

#### CONSENT

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review on request.

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