# **Tuberculosis Cutis Orificialis**<sup>+</sup>

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#### Abstrak

Satu kasus tuberkulosis kutis orifisialis yang jarang ditemukan, pada seorang pria berumur 54 tahun bangsa Indonesia telah dilaporkan. Ia telah menderita penyakit tersebut selama 5 tahun. Kelainan kulit berupa satu ulkus berlokasi di anus bagian posterior dengan diameter 2 x 3 cm. Dasarnya papilomatosa, di atasnya terdapat pus sero-purulent. Dindingnya bergaung, indolen, sebagian tepinya meninggi. Ia juga menderita tuberkulosis paru dan alat cerna. Kultur untuk Mycobacterium dari kulit, feses, dan sputum negatif. Tes tuberkulin dengan P.P.D. 100 IU memberi hasil positif. Diagnosis tuberkulosis kutis orifisialis disokong oleh pemeriksaan histopatologik. Pengobatannya berupa I.N.H. 400 mg, ethambutol 750 mg, dan rifampisin 450 mg per hari (berat badannya 37 kg). Hasilnya memuaskan, setelah sebulan ulkus menyembuh.

#### Abstract

A rare case of tuberculosis cutis orificialis in a 54 year and onesian male is reported. He has been suffering from the disease since 5 years. The lesion was an ulcer on the anterior part of the anus with a diameter of 2 x 3 cm and a papilomatous base with seropurulent pus on it. The ulcer was undermined, indolent with partially elevated edge. He has been suffering also from tuberculosis of the lungs and intestines. The culture for Mycobacteria of the skin, stool, and sputum gave a negative result. Tuberculine test with P.P.D. 100 IU gave a positive result. The diagnosis of orificial tuberculosis was confirmed by histopathologic examination. The patient was treated with 400 mg isoniazid, combined with 750 mg ethambutol and 450 mg rifampicin daily (his body weight was 37 kg). The result of the therapy was satisfactory, after one month the ulcer healed.

Keywords: Tuberculosis cutis orificialis, rare case, antituberculosis drugs.

### INTRODUCTION

Tuberculosis cutis orificialis (TCO) is a tuberculosis of the mucous membrane and skin of the orifices due to auto-inoculation of mycobacteria from progressive tuberculosis of internal organs. The underlying disease are pulmonary, intestinal, or rarely genitourinary tuberculosis. Mycobacteria shed from these foci in massive numbers are inoculated into the mucous membranes of the orifices usually after a preceeding trauma. 1

TCO begins as a small yellowish or reddish nodule, which appears on the mucosa and after breaking down, it forms an ulcer. The ulcer is circular or irregular with a typical punched out appearance. The edges are undermined, and the surrounding mucosa is swollen, edematous and inflamed with a mucopurulent exudation. The ulceration may spread and involve adjacent mucous membranes. 1,2

The purpose of this paper is to report a very rare TCO, which located on the anus.

## CASE REPORT

A 54-year-old Indonesian male looked for medical help on October 10, 1989 with a history of a swelling on the anus since 5 years which then ruptured. Since one year his body weight has decreased rapidly. The patient did not cough. Since 6 months his throat has been sored and his voice has been hoarse. In 1981, surgical treatment was done for intestinal tuberculosis

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and he was treated with isoniazid, ethambutol, and pyrazinamide for tuberculosis of the intestines and lungs. After 6 months the patient stopped the therapy. No contact person could be identified as the possible source of an eventual tuberculosis infection.

Physical examination revealed a bad general condition and a body weight of 37 kg. He looked cachectic and anemic. Blood pressure 120/80, pulse rate 72/minute, body temperature 36,5° C. Rhonchi's on both lungs were heard. There was an ulcer on the anterior part of the anus. The diameter was 2 x 3 cm with a papillomatous base and a sero purulent pus on it. The ulcer was undermined, indolent without signs of inflammation surrounding it. The edge of the anterior part of the ulcer was elevated (see figure 1).

Blood examination showed the following result: Hb 9.5 gram %, W.B.C. 10.600/mm<sup>3</sup>, BSR: 75 mm/hour (Westergren); differential count: basophil 0, eosinophils 1, rod-like neutrophils 0, segmented neutrophils 65, lymphocytes 34, monocytes 0. Stool and urine examination revealed no abnormalities, except Ca oxalate in the urine.

The tuberculine test with a PPD Rt 23 2 TU was negative, but with 100 TU gave a strong positive result (induration with a diameter 1 x 2 cm and vesicle upon it).

The histopathologic finding was as follows: there is an ulcer covered by cellular debris and surrounded by non-specific inflammatory cells. In the deeper por-

tion, under the ulcer and surrounding area many tubercle structures are found; some of them show caseation necrosis in the center (see figure 2). The epidermis adjacent to the ulcer is acanthotic. No acid fast bacili is found by using the Ziehl-Neelsen staining. This histological picture confirms the clinical diagnosis of tuberculosis cutis orificialis.

X ray of the lungs revealed active tuberculosis of both lungs with bronchiectasis.

Bacteriologic examination of the sputum, faeces and tissue from the edge of the ulcer were negative for either Mycobacterium tuberculosis or atypical Mycobacteria.

The treatment consisted of 400 mg INH, 750 mg ethambutol and 450 mg rifampicin daily. The dose of ethambutol was 25 mg/kg body weight during the first two months and then reduced to 15 mg/kg body weight thereafter.

After one month of treatment the ulcer was cured. The body weight of the patient was increased to 40 kg. After 2 months of further treatment the patient did not come again for follow up.

#### DISCUSSION

TCO is a very rare disease. Bryant reported that its incidence was only about 0,2 % of patients with internal tuberculosis. Males are more frequently affected than females, it is most common in middle aged

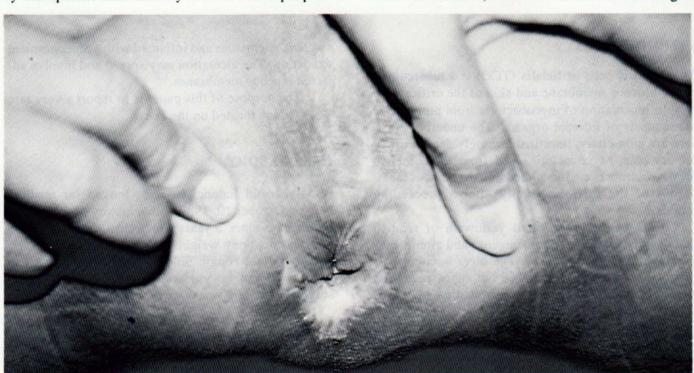


Figure 1. An undermined ulcer, the edge of the anterior part was elevated

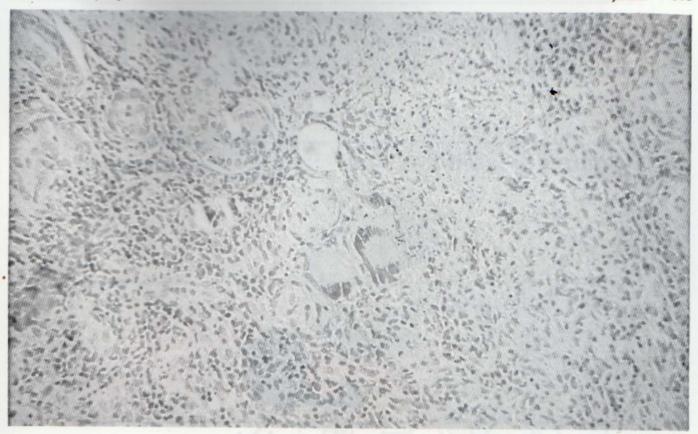


Figure 2. Many tubercle structures are found, some of them show caseation necrosis in the center

or older persons as in this case. Since 1969 only 2 cases has been reported from our department including this case.

In our case it is not difficult to make working diagnosis as TCO because of the following reasons. The patient looked cachectic and anemic. According to the history, he has been suffering from intestinal tuberculosis. X ray of the lungs showed tuberculosis. The ulcer was located on the anus with clinical appearance of indolence, and undermined edge. The diagnosis was confirmed by histopathological finding. Usually the acid fast bacili are easily demonstrated in tuberculosis cutis orificialis, but unfortunately jt was not found in this specimen. This negative finding may be due to the effect of antituberculous regimen (used by the patient) against the intestinal tuberculosis.

Wolff mentioned that TCO is extremely painful with inflammation of the surrounding mucosa. This opinion is not in accordance with our experience that all ulcers of skin tuberculosis are not painful with lack of inflammation as in this case, because tuberculosis is a chronic disease.

Actually the X ray of the intestines should be done, but the patient refused.

The tuberculine test gave a negative result with 2 TU, but positive with 100 TU. This showed that probably TCO belongs to the hypoergic reaction.<sup>2</sup>

The result of the culture gave a negative result. According to Djuanda, only 30 % of skin tuberculosis gave a positive result.<sup>3</sup>

The treatment of skin tuberculosis usually consists of a three drug therapy: isoniazid, ethambutol, rifampicin. This case was also treated with such regimen and the result was satisfactory; the ulcer was healed in a short time (one month). Our plan is to continue the therapy for a further six months after healing of the tuberculosis of the internal organs, but the patient did not show up.

### REFERENCES

- Wolff K, Tappeiner G. Mycobacterial Disease: Tuberculosis and atypical Mycobacterial infections. In: Fitzpatrick TB, Eisen AZ, Wolff K, Freedberg IM, Austen KF, eds. Dermatology in General Medicine, 3rd ed. New York: McGraw Hill Book Company, 1987; 2162-3.
- Mac Kenna RW, Mac Kenna RMB. Disease of the skin. 5th ed. London: Bailliere, Tindall and Cox. 1952.
- Djuanda A. Tuberculosis cutis in Jakarta (dissertation).
   Jakarta: Faculty of Medicine, University of Indonesia, 1969.