Infection due to Nocardia farcinica in a woman with chronic granulomatous disease
Fijen, C.A.P.M.J.; Schrama, J.G.; Kuijper, E.J.; Boiron, P.; Gerritsen, W.R.; Speelman, P.

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Infection Due to *Nocardia farcinica* in a Woman with Chronic Granulomatous Disease

Nocardiosis, an infecion due to an aerobic actinomycete, has been described in a patient with chronic granulomatous disease (CGD). The organism was resistant to isoniazid, rifampicin, and amikacin. PCR and secondary confirmation by biochemical analysis and gas chromatography were performed.

**References**


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A 56-year-old woman with CGD and a 1-month history of fever and a cough productive of greenish sputum failed to respond to oral erythromycin. She was admitted to the hospital.

Her medical history included recurrent inguinal lymphadenitis, pulmonary sarcoidosis, and coliis. In 1988, she was read for breast carcinoma. In 1994, masoiis due to infection with Aspergillus fumigatus was diagnosed, and she was read with amphotericin B; at home, therapy was changed to itraconazole because her renal function had deteriorated. CGD due to p47phox deficiency was diagnosed. Treatment for CGD with interferon and prophylaxis for infection with co-rimoxazole were discontinued because of side effects.

On admission, the patient's temperature was 39°C. Auscultation over the upper lobe of the right lung revealed the presence of fine crackles. The erythrocyte sedimentation rate (71 mm/h) and the WBC count (14.4 × 10⁹/L with left shift) were elevated, and anemia was present (hemoglobin level, 42.5 g/dL).

A chest radiograph and a chest CT scan revealed a cavernous lesion, 7 cm in diameter, in the right upper lobe of the lung (figure 1). Bronchoscopy revealed no abnormalities, but gram staining of the bronchoalveolar lavage fluid and biopsy specimens showed gram-positive, filamentous and branched bacteria, which were fluorescing with UV-ex 2B (R&R, Kandern, Germany). With an assumed diagnosis of nocardiosis and consideration of the amphotericin B–induced renal damage, iv cefoxime (1 g q.i.d.) and imipenem (500 mg q.i.d.) were administered. The fever resolved, and, within 6 months, the pulmonary cavernous lesion resolved.

Aerobic incubation of the bronchoscopic specimens at 37°C for 4 days yielded folded, heaped, slightly orange colonies producing an aerial mycelium. The microorganism was partially acid-fast, was resistant to lysozyme, and produced urease and acid from glucose and rhamnose. *N. farcinica* was identified on the basis of negative decomposition of adenine, casein, xanthine, hypoxanthine, and yrosine; equal growth at 35°C and 45°C; opacification of Middlebrook agar; results of qualitative evaluation of cell-wall and carbon sources, and specific enzymatic activities; however, the young may be due to the residual killing activity present in her granulocytes. Consistent with this hypothesis, a recent report described residual superoxide production by granulocytes in seven of 11 adult CGD patients for whom he was e of infecious complications was low during you h.

The lungs, brain, and traumatic and postoperative wounds were the most common primary sites of infection due to *N. asteroides* among 65 cases, but the paranasal sinuses, the oral palate, and the eyes can also be involved [2, 3, 5–7]. Mouse studies demons rats are e ha *N. farcinica* is more virulent than *N. asteroides* [6]. More patients with *N. farcinica* infec ions [2, 3, 6–9] are immunocompromised (70%) than are patients with *N. asteroides* infec ions [1]. *N. farcinica* has a greater endo cytosis of disseminated e [6] of the CNS

![Figure 1. Radiograph and CT scan (insert) of the horax of a pa ien wi h chronic granuloma ous disease and infec ion due o *Nocardia farcinica*. A cavernous lesion developed 1 mon h af er admission (arrow).](image-url)
Neher her are case-con role studie comparing he efficacy of he vari-
ous rea men regimens.

C. A. P. Fijen, J. Schrama, E. J. Kuijper, P. Boiron,
W. Gerrissen, and P. Speelman
Department of edical microbiology and Department of Internal
disease/Infectious Diseases, Academic edical Centre, University of
Amsterdam, and Department of Hematology/Oncology, Anthoni van
Leeuwenhoek Hospital, Amsterdam, the Netherlands: and Unité de
ycologie, National Center for ycose and Antifungal Agents, Institut
Pasteur, Paris, France

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Neurosyphilis and Syphilitic Gumma of the Adrenal
Gland

Syphili ic gummas have been described in differen body organs,
bu syphili ic of he adrenal gland is rare; only wo cases were repor ed in he firs half of he cen ury [1]. As far as we know, ours is he firs case of syphili ic gumma of he adrenal gland o
he adrenal gland in recen years.

A 66-year-old male was admi ed o he hospi al in 1996 wi h a
2-week his ory of abdominal pain and cons ipa ion and diminished
vision in he righ eye; he had had he hargy, polydipsia, and gai
dis urbance for several mon hs.

On admission he was afebrile and had angular cheilosis and a
small kera oid lesion a he righ oral commissure. He was orien ed
x3, bu he shor -erm memory was impaired. He had diminished
cen ral vision in he righ eye, wi h minimal blurring of he disk
margins on he righ . He had mild upper-ex remi y weakness ha
was more pronounced on he lef han on he righ . His gai was
broad based and mildly a axic.

Labora ory s studie revealed he following values: sodium, 137
mEq/L; po assium, 5.2 mEq/L; chloride, 102 mEq/L; hyroxine,
0.82 µg/dL; and hyroid s imula ing hormone, 33.86 µg/dL. A es
for hyroid an ibodies was posi ve. The cor isone was nega ve. He was resusci a ed wi h in ravenous fluids, hydro-
cor isone, and an ibio ics. All cul ures were nega ve. The cor isol
level a ime of collapse was 18 µg/dL [2, 3], and he resul s of a
cosyn ropin es were normal.

Addi onal work-up revealed a rapid plasma reagin (RPR) e ir
of 1:8,192, and a serum fluorescen reponem an ibody (FTA)
es was posi ve. Serology for IgG and IgM an ibodies o Borellia
burgdorferi was posi ve, bu PCR assays of blood and CSF were
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