Subdural spinal fungal granuloma due to *Candida tropicalis*

Case report

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A case is reported in which spinal cord compression was caused by granulation tissue due to *Candida tropicalis* infection.

**KEY WORDS** • spinal cord compression • granuloma • infection • *Candida tropicalis*

**S**pineal cord compression due to fungal infection is very rare. *Candida* usually causes meningitis. The present case demonstrates spinal cord compression due to granuloma caused by *Candida tropicalis*.

**Case Report**

This 45-year-old man was admitted on September 29, 1977, with a 3-month history of weakness of both lower limbs. Onset was insidious and the course progressive, leading to complete loss of function in both lower limbs within 4 weeks. He had suffered from incontinence of urine for the same period of time. He also reported numbness up to the nipple level. There was no history of fever, cough, loss of appetite, or loss of weight.

**Examination.** The patient was slight in build and anemic. Blood pressure was 110/70 mm Hg and pulse was 80/minute. Higher functions, cranial nerves, and the upper limbs were normal. In the lower limbs there was paraplegia of a spastic type, and loss of all modalities of sensation up to T-4. Plantar reflexes were upgoing bilaterally. There was no deformity or tenderness of the spine.

Hemoglobin was 100%; white blood cell count 7000/cu mm; erythrocyte sedimentation rate, 1st hour, 52 mm; blood urea 20 mg%; and blood sugar 78 mg%. Urine showed traces of albumin and 6 to 8 cells per high-power field. Urine culture was sterile. Plain x-ray films of the spine were normal, and a myelogram showed a complete intradural block at the T-5 level. Cerebrospinal fluid was xanthochromic, with glucose content 80 mg% and protein content 580 mg%.

**Operation.** Thoracic laminectomy revealed a grayish-white mass in the subdural space extending from T-2 to T-5. The mass was situated anterolaterally in relation to the spinal cord, displacing the cord to the left and posteriorly. It was removed in toto. Histopathological examination of the specimen revealed nonspecific granulation tissue; culture of the tissue grew *Candida tropicalis* (Fig. 1). Culture for acid-fast bacilli was negative. The patient was given two vials of amphotericin B intravenously, but he has shown no improvement in the past 9 months.

**Discussion**

*Candida tropicalis* can sometimes be isolated from body sites that have a normal flora and is generally regarded as nonpathogenic; it may, however, under certain circumstances, become of primary clinical importance. Blood dyscrasias, immunological defects, any chronic illness, steroid administration, or broad-spectrum antibiotics predispose to *Candida* infection by reducing the host resistance.

The clinical course in our patient simulated spinal neoplasm, and the impression at operation was that it
was tubercular granulation tissue. However, a factor against this being tubercular was the ease with which the mass could be separated and totally removed from the arachnoid and dura. Diagnosis of its fungal nature was only established on culture. Our patient had none of the predisposing factors mentioned above nor any lesion in the chest or paranasal sinuses, which are the usual portals of entry for the infection.

Only two vials of amphotericin B were given postoperatively, so as to prevent its systemic spread, rather than a full course, as there was no evidence of systemic infection. Although the decompression was adequate, the patient has shown no recovery, perhaps because of vascular impairment of the cord, which appeared pale at the time of surgery.

References


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