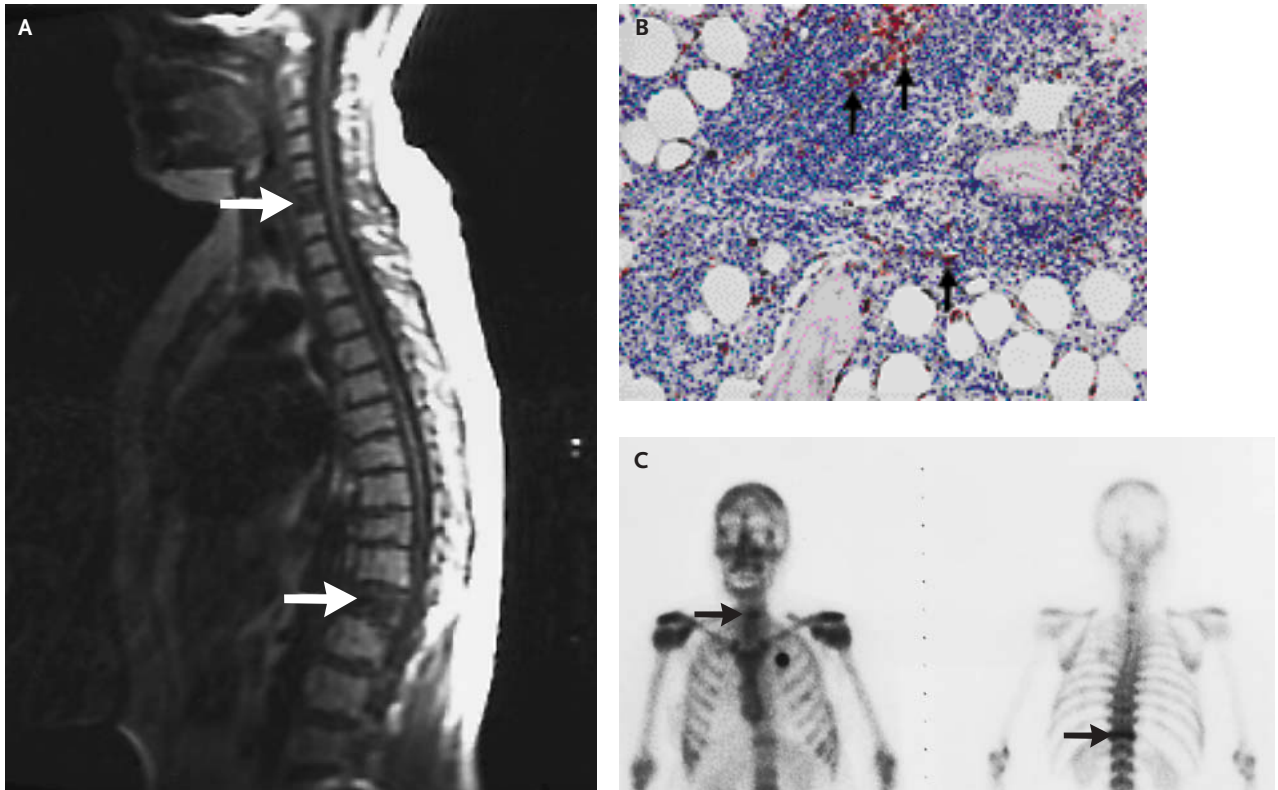


## IMAGES IN CLINICAL MEDICINE

## Systemic Mastocytosis



**A** 44-YEAR-OLD WOMAN PRESENTED WITH A ONE-YEAR HISTORY OF NECK and lower back pain. The neck and back pain had worsened over the previous two months and was associated with new symptoms of drenching night sweats, watery diarrhea, and episodes of flushing. Magnetic resonance imaging (MRI) of the spine revealed abnormal signal in the C6 and T11 vertebral bodies, findings that suggested the possibility of infiltrative or metastatic disease (Panel A, arrows). A biopsy of the C6 vertebral abnormality revealed perivascular spindle cells that stained strongly for tryptase, suggesting a diagnosis of systemic mast-cell disease. The values for serum tryptase (30.7 ng per milliliter) and urinary prostaglandin  $F_{2\alpha}$  (2885 ng per 24 hour) were two and three times the upper limit of the normal range, respectively. Examination of a bone marrow aspirate and biopsy specimen revealed paratrabeular spindle-shaped mast cells that stained strongly for tryptase (Panel B, arrows). A diagnosis of systemic mast-cell disease with 5 to 10 percent bone marrow involvement was made. The patient was treated with interferon alfa (3.5 million units given subcutaneously three times a week), high-dose fexofenadine, ranitidine, and monteleukast. At a follow-up visit four months later, a whole-body bone scan showed increased uptake within the C6 and T11 vertebral bodies, which was consistent with the patient's known disease (Panel C, arrows). However, she reported substantial improvement in her neck and back pain.

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