

CORRESPONDENCE

MYCOTIC ANEURYSMS OF THE ABDOMINAL AORTA

To the Editor:

In a recent issue of *The American Journal of Medicine*, Malouf et al discussed the diagnostic challenge of mycotic aneurysms (1). We consider this to be a very important issue. We recently observed a case of abdominal aortitis caused by *Staphylococcus aureus* infective endocarditis in a 74-year-old man. The patient was still febrile 15 days after the diagnosis and after adequate antimicrobial initiation. Results of transesophageal echocardiography were unremarkable, but abdominal echocardiography revealed an aortic aneurysm. An abdominal computed tomographic (CT) scan exhibited an extravascular leak of the contrast medium from the posterior face of the aorta without aortic dilatation (Figure). Thus, aortic aneurysm was excluded and an aortic

rupture was diagnosed. A surgical repair was attempted, an aortic resection was performed, and a prosthetic aorto-aortic tube was implanted. Postoperative surgical aortic examination revealed an intramural abscess with an intimal perforation. Histological examination showed aortic inflammation with intraparietal leucocytosis, but without evidence of microorganisms.

Infectious metastasis affects numerous organs, such as the abdominal viscera (liver, kidney, and spleen), central nervous system (eye, brain), skin, and lungs. Aortitis is usually caused by the local extension of an infectious process involving the aortic ring (2). Such "primary" bacterial aortitis has been described in previously injured vessels (3).

As underlined in the study by Malouf et al, thoracic aortitis caused by endocarditis seems to be a rare entity (1). Furthermore, abdominal aortitis caused by infective endocarditis ap-

pears not to have been previously reported and seems to be rare as well. Thoracic and abdominal aortic perforation and aortitis usually lead to rapid sudden death, which could explain the lack of previous reports and which shows that the discovery of our case was fortuitous.

As concluded in the study by Malouf et al, and as we previously published, it could be of great interest to systematically perform early thoracic and abdominal CT scans for all patients suffering from infective endocarditis (1,4).

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Figure. Abdominal contrast medium–enhanced computed tomographic scan, sagittal view. Leak of the contrast medium from abdominal aorta (arrow).

BENEFICIAL RESPONSE TO INTERLEUKIN 1 RECEPTOR ANTAGONIST IN TRAPS

To the Editor:

Interleukin 1 is one of the central proinflammatory cytokines, and it has been implicated in *in vitro* studies as an important pathogenic factor in several autoinflammatory syndromes (1–3). Hawkins et al reported good results with the recombinant interleukin 1–receptor antagonist anak-

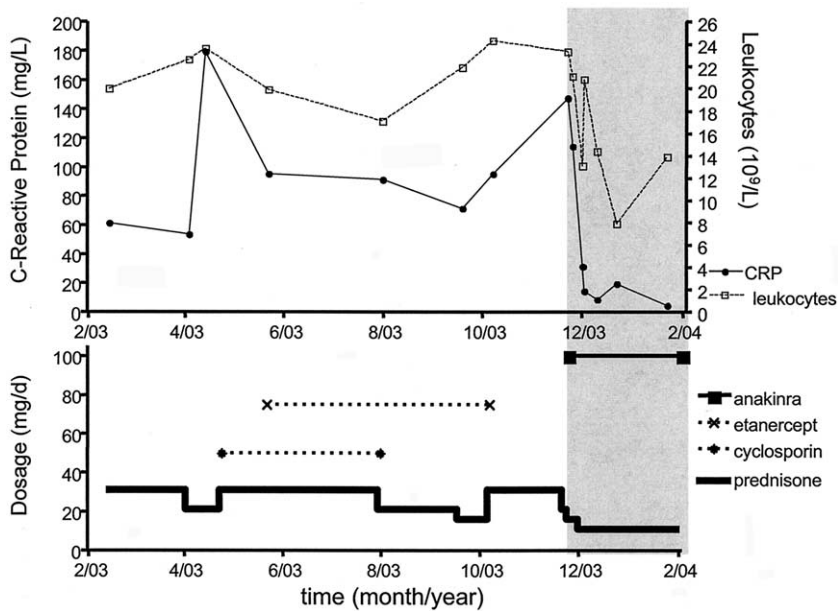


Figure 1. Concentration of C-reactive protein (CRP) and leukocytes in a patient with tumor necrosis factor-receptor-associated periodic syndrome, from February 2003 to January 2004. Treatment used is shown in the bottom half of the figure, in dosage of mg per day, except for etanercept, which is dosage per week. Shortly after start of anakinra (gray area), the concentration of CRP and leukocytes dropped to the normal range.

inra (4) in 2 patients with Muckle-Wells syndrome, which is one of the autoinflammatory syndromes (5). This prompted us to try anakinra in a patient with severe, treatment-resistant tumor necrosis factor (TNF) receptor-associated periodic syndrome (TRAPS) (Mendelian Inheritance in Man #142680).

The patient, a 19-year-old Dutch woman, was diagnosed with TRAPS confirmed by a C43Y-mutation in the TNF-receptor type 1 (TNFRSF1A) gene. From the age of 1 year she had episodes of fever, general malaise, abdominal pain, myalgia, and painful erythematous skin lesions, accompanied by vigorous acute phase response. Numerous therapies were tried, including nonsteroidal anti-inflammatory drugs (NSAIDs), methotrexate, and cyclosporin, with disappointing results. The only reasonably effective drug was prednisone (at least 30 mg daily). After the diagnosis was made, she started with the TNF-inhibitor etanercept (6), which improved symptoms temporarily, but

the acute phase response persisted and prednisone could not be tapered. A brief trial of sirolimus, an inhibitor of T-cell activation (7), had to be stopped because of severe allergic reaction. In the previous year, inflammatory symptoms had become unremitting and occurred daily. Between July 2002 and November 2003 (total: 22 measurements), median C-reactive protein concentration was 117.5 mg/L (interquartile range, 70.5 to 157.5 mg/L) and the leukocyte count was $20.9 \times 10^9/\text{L}$ (interquartile range, 14.9 to $23.6 \times 10^9/\text{L}$). The patient consented to the use of anakinra given subcutaneously at a dose of 100 mg daily, which resulted in remarkable improvement of symptoms and an unprecedented decrease of C-reactive protein concentration and leukocyte count within days (Figure 1). Prednisone was rapidly tapered to 10 mg daily. After 1 month, the patient was symptom-free and feeling well for the first time in many years. However, she did suffer pain and redness at the

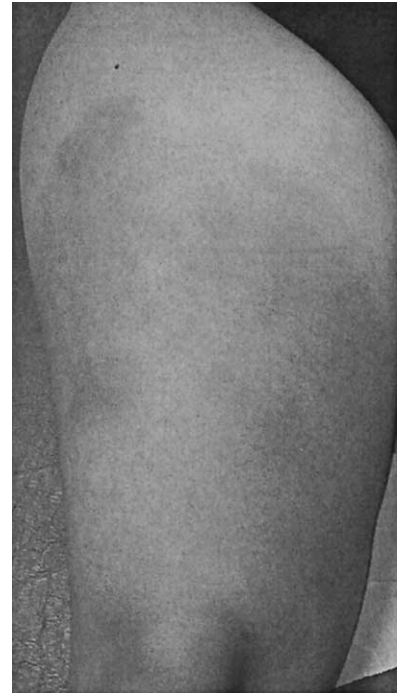


Figure 2. Erythematous and painful injection site reaction associated with subcutaneous use of anakinra on the upper leg of the patient. Such reactions clear up after a few days, and are less severe when anakinra is used in the abdominal region.

site of the anakinra injection (Figure 2).

Tumor necrosis factor receptor-associated periodic syndrome is a hereditary autoinflammatory syndrome caused by TNFRSF1A gene mutations and characterized by recurrent episodes of fever and inflammation. Its clinical features can vary greatly among patients, from recurrent, mild, localized myalgia to the incapacitating, severe symptoms described in this patient (8). In mild cases, the occasional use of NSAIDs is usually sufficient for management of symptoms. After the discovery of the genetic etiology, anti-TNF treatment in the form of etanercept has been introduced and found to be successful in many cases (6,8,9). Not all patients benefit, however, and initial response may wear off with prolonged therapy, necessitating alternative therapies. In one severe case unresponsive to etan-

cept, Drewe et al (7) describe a beneficial response to sirolimus. This could not be used in our patient because of an allergic reaction.

Anakinra is a recombinant form of interleukin 1ra, an endogenous inhibitor of interleukin 1 signaling, that is used in the treatment of rheumatoid arthritis (4). It is usually well tolerated; the most common side effect is an injection-site reaction with pain, erythema, and local inflammation (10). The beneficial response to anakinra argues for a central role of interleukin 1 in the pathogenesis TRAPS (1–3,5). It is generally assumed that in this syndrome the inflammatory effects of TNF- α and lymphotoxin are not countered adequately, because of a lack of a soluble TNF-receptor, the major inhibitor of TNF. In that respect, it is hard to understand that the TNF-receptor construct, etanercept, had hardly any therapeutic effect in our patient. Perhaps even more difficult to explain is the effectiveness of interleukin 1ra, since interleukin 1 β and interleukin 1 α are responsible for only a small part of the biological effects of TNF- α and lymphotoxin. Further research is required and long-term efficacy must be determined.

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GARCIN SYNDROME ASSOCIATED WITH METASTATIC COLORECTAL CARCINOMA

To the Editor:

A 59-year-old-man presented to the emergency department with right-sided facial pain and difficulty swallowing of about 2-weeks duration. He had a history of disseminated colorectal carcinoma. Initial examination showed motor and sensory involvement of the right V cranial nerve. All other cranial nerves, including the gag test for IX and X, were intact. Video swallow studies and esophagogastroduodenoscopy suggested motor dysphagia. Over the next few days of hospitalization, the patient progressively developed cranial nerves palsies of VII, VIII, IX, X, XI, and XII, which completed the clinical picture of Garcin syndrome. Magnetic resonance imaging (MRI) of the brain showed an extra-axial enhancing lesion in the vicinity of the right cerebellopontine angle that extended along the posterior aspect of right temporal lobe, suggesting a metastatic lesion. A survey of the literature indicates that this may be one of the first reported cases of Garcin syndrome caused by colorectal carcinoma.

Garcin syndrome is a progressive ipsilateral involvement of the cranial nerves resulting in paralysis of all or most cranial nerves without involvement of long tracts or the cerebellum, and without signs of increased intracranial pressure (1). It has been reported in association with primary nasopharyngeal tumors and a variety of metastatic tumors. Radiation is the preferred mode of treatment for palliation, but the prognosis is poor (2). Garcin syndrome can also occur because of infections and as a paraneoplastic syndrome (with increased anti-Hu antibodies in patients with small cell lung cancers) (3). This pa-