tions is doing both parents and their unborn children a great disservice.

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"Doughnut" granulomas in Q fever

Q fever, though uncommon, may produce distinctive "doughnut" granulomas in the liver and bone marrow[1] that may be helpful in establishing the diagnosis, as the following case illustrates.

Case report

A 43-year-old white man, employed as a roofer, presented with a 2-week history of nausea, vomiting, diarrhea, fever, dyspnea, productive cough and hemoptysis. At age 17 years he had had tuberculosis and pneumonia that required a prolonged hospital stay and 7 months of chemotherapy. He had lived on a farm when he was a child, but since then had been an urban dweller.

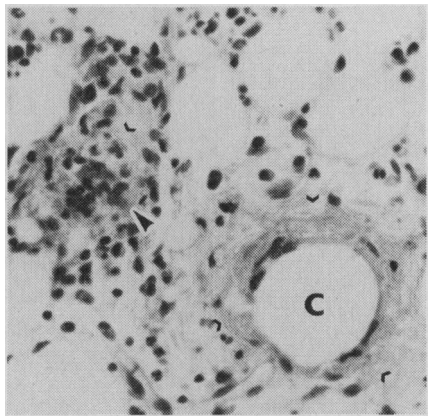

FIG. 1—Two granulomas in bone marrow, one showing central clear area (C) surrounded by histiocytes and ring of fibrinoid material (small arrowheads), and other showing histiocytes (large arrowhead) surrounded by fibrinoid material (hematoxylin–eosin; original magnification ×100).

He had smoked two packages of cigarettes per day for 32 years and drank moderate amounts of beer. He denied contact with an abattoir or wood- or leather-processing factories and consumption of unpasteurized cow's or goat's milk or milk products.

At the time of admission his temperature was 39.0°C, and he had tachypnea. Investigation revealed hypoxemia, respiratory alkalosis and suspected pneumonia in the right upper lobe. Urine, sputum and blood cultures revealed no pathogens, and there was no response to treatment with penicillin G, which had been given between the second and fifth hospital days. A transbronchial biopsy specimen was inadequate for diagnosis. The patient was thought to have miliary tuberculosis and was given antituberculous therapy.

On the sixth hospital day ultrasonography revealed an enlarged liver. On the 14th hospital day a serologic test for Q fever was reported to have given a positive result (a complement-fixing antibody titre of 1:2000). Tetracycline therapy was begun on the 15th day, and improvement was noted within 2 days.

Liver and bone biopsies revealed atypical granulomas, most of which had a central round, clear area surrounded by attenuated cytoplasm and several nuclei of histiocytes. Around this area was a mesh of short, stubby and intensely eosinophilic fibrinoid material within and around which were a few histiocytes and polymorphonuclear leukocytes. This pattern varied: some granulomas had no central vacuole, some had vacuoles without fibrinoid material, and some had central amorphous fibrillar material containing dense basophilic, spherical bodies resembling nuclear debris. The bone marrow lesions were the most striking, with numerous plasma cells close to the granulomas (Fig. 1). Special stains failed to demonstrate bacteria, mycobacteria, rickettsia and fungi.

Comments

The pathogenesis of the atypical granulomas is unknown. Ende and Gelpi[2] thought that similar lesions in bone marrow represented vasculitis, and Okun and colleagues[3] thought

they represented perivasculitis. Pellegrin and associates[4] postulated that the central clear area was a fatty vacuole.

These lesions have been fittingly described as "doughnut" granulomas.[3] Many authors believe the lesions are highly suggestive of Q fever,[3,4] although similar lesions have been associated with Hodgkin's disease,[4] tuberculosis[4] and infectious mononucleosis.[5] Although these lesions will not be present in all patients with Q fever,[6,7] their presence will help clinicians establish a likely diagnosis.

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Can academic background be detected during internship?

Drs. Christel A. Woodward and Ronald G. McAuley demonstrate (*Can Med Assoc J* 1983; 129: 567–569) that medical students lacking traditional academic backgrounds can perform just as well during internship as their colleagues who do have traditional academic backgrounds. However, they wrongly conclude that traditional medical schools can therefore expand their admissions criteria without worry. Since their study included only students enrolled at McMaster University Medical School, they failed to demonstrate how the two study groups would fare in a traditional medical school environment and subsequently during internship.

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[We showed this letter to Drs. Woodward and McAuley. Their reply follows. —Ed.]

We stated in our article that the medical curriculum at McMaster University may be uniquely suited to assist students with nontraditional backgrounds to cope with medical training. We offered no evidence that medical schools cannot broaden their admissions criteria. Rather, we suggested that such criteria could be relaxed. The generalizability of our findings can only be tested by allowing a wider range of students to receive medical education in traditional programs and examining how they, compared with their classmates, fare during internship.

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China's deterrent fee

The Canadian Medicare system is in the midst of a debate concerning extra-billing by doctors and the imposition of deterrent fees by provinces for hospital care. Studies on this topic often seem to confirm the prejudiced view of the investigators that such measures keep the poorer part of our society from seeking medical or hospital care.

The socialized system in China uses deterrent fees. In that country every patient in hospital must pay 1 yuan (64 cents) per day for meals. The average salary, be it for social workers, police, sociology teachers, floor sweepers, technicians or scientists, varies between 30 and 90 yuan ($19 and $58) per month. The state believes it to be proper to have a deterrent fee by which patients pay back to the state the amount of money that has been spent on their daily food. There is thus no way that a patient could save money by abusing the hospital system and getting free meals.

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CMAJ covers

There, there, dear editor, don't feel you have to apologize for displaying a cover picture upside down and backwards (*Can Med Assoc J* 1983; 129: 685). Here's one reader at least who thinks that plenty of the Journal's examples of modern art could just as well be presented that way, or maybe even lying on their sides, for all the difference it would make to any objective observer. One or two of the pictures might even have benefited from being portrayed dangling from a spike driven through one corner. That's what they used to do to the Eaton's catalogue back on the prairie, and I never heard that anyone felt he had to apologize for ruffling artistic sensibilities.

What's at issue is the quality of the works themselves. Consider the *Mona Lisa* or the *Venus de Milo.* Would anyone be likely to reproduce either of those wrong side up? Backwards, maybe, but upside down, never. And even to think of such a possibility for *Winged Victory* is preposterous.

But no need to apologize. After all, Norman Cousins tells us that a good joke will cure the Black Death, and Jonathan Miller advises us to make our patients laugh. I'd say you're right on track. Don't change a thing. Keep up the good funny work.

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