This is a benign event and requires no therapy, only reassurance of the observers. Delayed hypersensitivity is indicated by a positive histoplasmin skin test and an acute response serologically, *i.e.*, rise in both IgM and IgG specific antibody titers.*2* The second situation, at the other end of the spectrum, is similar in its appearance to chronic tuberculosis both in clinical development, x-ray film appearance with main localization in apices, and in pathologic appearance. Caseation, granuloma formation and scarring go on simultaneously. This is a particularly serious form of the disease with high mortality rate in untreated cases and probably represents the bulk of the cases first pointed out by Furcolow and Brasher*3* and reported in relatively large numbers by both the Veterans Administration and the Public Health Service.*4* Again delayed hypersensitivity is indicated by positive skin test and the serologic response is almost exclusively IgG in character.*2*

The third situation is the enigma. Acute cavitary infection with a progressive and devastating clinical course is seen. The immune response is variable with usually, but not invariably, positive skin test and a serologic response which has not been qualitatively documented, although relatively high titers of complement fixation antibody may be seen. These patients often respond to doses of amphotericin B totaling 0.5 gm whereas the chronic cavitary form regularly seems to require something in the neighborhood of 2.0 gm (but experience varies). Some of the acute cases have been reported to respond to bed rest alone, a situation without parallel in truly chronic cavitary disease.*7*

Chick and Bauman are uncomfortable with the analogy between histoplasmosis and tuberculosis (as witness their statement that "some recent observations in experimental animals and in humans suggest that cavitary histoplasmosis may be an acute manifestation in at least some instances. If these observations are valid, new questions must be raised in the consideration of the pathogenesis of histoplasmosis, i.e., acute and chronic disease pathways.").*1* I agree with them in part, but, in the behavior of the primary cases and the chronic cavitary cases, I believe the general process that goes on in tuberculosis is going on in histoplasmosis. The failure of animal models to simulate the chronic cavitary disease seen in man in histoplasmosis is reminiscent of similar failures in finding experimental expressions of chronic cavitary tuberculosis. (It is reassuring in one way; man is different from the ape!)

I agree with the conclusion of Chick and Bauman that we have much to learn about the immune response to *Histoplasma capsulatum* in man. Indeed! It must be kept in mind, however, that *Histoplasma capsulatum* and mycobacteria do elicit qualitatively similar responses in man including reinfection response,*2,3* and that our studies must keep to some sense of order until the data of carefully planned observations subjected to highly critical interpretation prove otherwise.

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REFERENCES

1 Chick EW, Bauman DS: Acute cavitary histoplasmosis--fact or fiction? Chest 65:479-480, 1974
5 Baum GL, Larkin JC Jr, Sutliff WD: Follow-up of patients with chronic pulmonary histoplasmosis treated with amphotericin B. Chest 58:552-555, 1970
6 US Public Health Service: Cooperative mycoses study: Course and prognosis of untreated histoplasmosis. JAMA 177:292-296, 1961
9 Schwarz J, Baum GL, Floyd H: The pathogenesis of "epidemic" histoplasmosis. Ann NY Acad Sci 89:47-58, 1960

Migration of Broken Sewing Needle from Left Arm to Heart

*To the Editor:*

Intracardiac foreign bodies have been reported to be not uncommon in wartime. Most of the foreign bodies retained in the heart are due to direct penetrating trauma. *1,4* Those migrating from peripheral circulation to the heart are rare. *1,5* However, the increasing use of intravenous polyethylene catheters has led to a growing incidence of accidental catheter breakage and migration of fragments to the heart. Here a very unusual case is reported: a migratory broken sewing needle traveled from a man's left arm to his heart and was successfully removed by open...
heart surgery.

The patient was a 24-year-old single male laborer. About 11 days prior to his admission to Taiwan Veterans General Hospital, the inner aspect of his left upper arm was accidentally penetrated by a household sewing needle. The extending part (about one third) of the needle was fractured, making withdrawal of the remainder impossible. Immediate x-ray examination at a private clinic disclosed the needle fragment to have been retained in the left upper arm. He suffered no discomfort until five days after injury, when he suddenly sustained a sharp chest pain of brief duration. Chest films were taken and disclosed the presence of the broken needle in his heart (Fig 1). Followup chest films at TVGH showed no definite change in the position of the broken needle. Open heart surgery with the aid of extracorporeal perfusion, was carried out on October 12, 1973, four days after admission. The right ventricular cavity was entered through a small longitudinal right ventriculotomy. The needle fragment was found embedded in the interventricular septum near the apex. Only a small part of the needle (about 0.4 cm), ringed by a band of thrombus, could be viewed from the right ventricle. The remaining part had probably penetrated the interventricular septum towards the left ventricle. The needle, measuring 2 cm long and noted to be rusty, was carefully removed.

The patient stood the operative procedure well and had an uneventful postoperative course.

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REFERENCES

Brady-Tachy Syndrome with Prolonged Retrograde Conduction due to Digitalis and Propranolol Intoxication

To the Editor:

Severe bradycardia as a consequence of overdosage with digoxin or with propranolol is well documented; when given together there is the further risk of additive effects. This case is of interest because of the type of conduction defect produced and in particular because of the very prolonged retrograde conduction interval.

CASE REPORT

A 68-year-old woman was admitted to the emergency room complaining of dizziness and severe generalized weakness. For the previous few weeks she had been receiving digoxin and propranolol for episodes of tachycardia, but no further information was available on the nature of these attacks. On examination, her skin was pale and cold, the heart rate was 30 per minute, and the systolic blood pressure was not recordable. The neck veins were distended, rales were present throughout the lungs, the liver was enlarged and tender, and there was mild pitting edema of the legs. The electrocardiogram showed a junctional bradycardia with retrograde conduction and an RP' interval which measured from 0.38 seconds.

Figure 1. The needle fragment was found in the heart five days after injury.

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