CASE REPORTS

FUGITIVE PERICARDITIS

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The following case is reported as an example of a little known complication of primary tuberculous infection.

A female child aged two and a half years was admitted to Southmead Hospital, Bristol, on Dec. 3, 1946. Her parents and sister were in good health

98° F., and the pulse 120 per minute, regular, but of poor volume. The cardiac impulse was diffuse and wavy and the apex beat was in the sixth left interspace in the anterior axillary line. A loud pericardial friction rub was audible all over the precordium; the heart sounds were muffled, but there were no murmurs. There were no signs of

FIG. 1.—Electrocardiogram on Dec. 7, 1946, showing elevation of the S-T segment in leads I and II.

FIG. 2.—Electrocardiogram on Dec. 11, 1946, showing inversion of T wave in lead I.

and no history of tuberculosis was obtained. Apart from mumps at the age of two years, the child had been well until an attack of measles a month before admission. She was left with a cough and failed to regain her usual vigour. On Nov. 30, 1946, she refused her food, became pale, dyspnoeic, and distressed.

On examination on admission she looked pale and ill and was orthopnoeic. The temperature was

pulmonary or systemic congestion. At the apex of the right lung the percussion note was impaired, the breath sounds being tubular and the voice sounds increased. There were no adventitious sounds. An x-ray of the chest showed a greatly enlarged cardiac silhouette, a suggestion of fullness at the right hilum, and an opacity at the apex which was considered to be due to collapse or consolidation of part of the right upper lobe. An electrocardiogram

showed in addition to tachycardia, elevation of the S-T segments in leads I and II (fig. 1). A blood count showed haemoglobin 102 per cent. and white cells, 7,000 per c.mm., with a normal differential.

Eighty thousand units of penicillin were given daily in divided three-hourly doses for a week. The child remained critically ill for three days, but subsequent improvement was rapid. By Dec. 11 an x-ray showed some clearing of the opacity at the right apex, and in the cardiogram the T wave was inverted in lead I (fig. 2). The Mantoux test was positive on that date.

Improvement continued until Dec. 18 when her transference to an isolation hospital was necessitated by an attack of chickenpox. An x-ray of the chest taken on Jan. 9, 1947, showed a normal sized heart and almost complete clearing of the right apical opacity. She was sent for convalescence on Jan. 15. When seen three months later the child's health was fully restored, her lung fields were clear, and her heart was normal. She was kept under observation for a further nineteen months and remained well.

Discussion

While the etiology of this case remains in doubt there are reasons for regarding it as an example of benign pericarditis associated with a primary tuberculous complex as reported by Wallgren (1947). This author described two patients with the combination of pericarditis and a primary tuberculous complex. His first case developed pericarditis one month after the onset of an illness characterized by fever and enlargement of the left hilar glands. A tuberculin skin test was positive soon after symptoms were noted. The child was ill for two months and then went on to make a complete recovery which was maintained for the subsequent three years of observation. His second case was very similar: again there was fever and enlargement of the hilar glands, and in addition erythema nodosum. Recovery was equally rapid and good health was maintained three years later. The excellent prognosis and freedom from relapse were especially stressed.

Wallgren stated that the acute benign pericarditis of his two cases was comparable to that of acute

tuberculous allergic serofibrinous pleurisy and differed from the usual tuberculous pericarditis in that recovery was rapid and complete. In view of the favourable prognosis an analogy with the tuberculous serous meningitis described by Lincoln (1947) is also suggested. The interval of one month between the initial infection and the complicating pericarditis corresponds to the stage of generalization of the infection when miliary tuberculosis or tuberculous meningitis most often develops. As Wallgren pointed out this raises the possibility of a blood stream infection of the pericardium, but direct extension from enlarged mediastinal glands is just as likely.

The case reported bears a close resemblance to Wallgren's two cases. The symptomatology, positive Mantoux test, radiological appearances, recovery, and subsequent good health show a similar trend of events. This case was much younger than Wallgren's: two and a half years compared with nine years and six years.

An alternative diagnosis which must be considered is acute rheumatism, but the age of the patient, the absence of suggestive symptoms and signs during the acute stage, and of any relapse during the next twelve months, is against a rheumatic etiology. Pneumonia with purulent pericarditis was considered in the differential diagnosis, but was excluded by the course of the illness.

Summary

A description is given of pericarditis associated with a lung lesion and complete recovery within two months. It is suggested that this is an example of acute benign pericarditis associated with a primary complex as described by Wallgren (1947).

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REFERENCES

- Lincoln, E. (1947). *Amer. Rev. Tuberc.*, 56, 95.
Wallgren, A. (1947). *Act. med. scand. Suppl.*, 196, 132-144.