CHAPTER 17

EPIDEMIC PLEURODYNIA (BORNHOLM DISEASE)

MANY studies of epidemic pleurodynia have been made in the literature. One outbreak was reported in the Australian Army, and it is not unlikely that other cases occurred.

During the first large epidemic of sandfly fever in the Middle East in 1940, similarity was noted between an oppressive pain in the chest common in that series and the constrictive type of pain often complained of in the Bornholm disease. In this observation was an oblique suggestion that epidemic pleurodynia might prove to be a variant of the sandfly-dengue group. Megaw has suggested that this disease may be spread by an insect vector, but no relevant information on this is available so far.

In 1944 when Andrew described the features of an epidemic of Bornholm disease in troops in North Queensland speculation was raised whether the disease, certainly an infection, might not be a member of the dengue-sandfly fever group. It might be further pointed out that the pain in pleurodynia occasionally spreads to the neck, at first sight suggesting a condition of meningismus. A parallel between epidemics of pleurodynia and poliomyelitis has also been suggested by some writers on epidemiological grounds. This too appears to be surmise only.[1]

This outbreak in North Queensland affected 35 men who were studied in hospital. Most of them were under 25 years of age (24 out of 25). The pain which is the chief feature of the disease extended from the upper abdomen into the lower parts of the chest. When unilateral it was more often on the right side, but bilateral and central pain was common. It was a constant pain, accentuated by all special respiratory activity. Half the patients had a chill or mild rigor. A few had a dry cough. A pleural rub was heard in some, but X-ray examination revealed no abnormality in the lungs or diaphragm. No blood changes were found, and experiments with mice into which the blood was injected were inconclusive. A good recovery was made by all patients, the only residual symptoms being tenderness which disappeared in a week. No complications were observed such as orchitis which is stated to occur occasionally in some epidemics. No evidence of food infection or the existence of a vector was adduced from this outbreak, nor was there anything found to suggest a possible relationship with another disease.

REFERENCE

J. W. D. MEGAW, *Bull. War Med.*, Sept. 1941.

[1] Later work indicates that the Bornholm disease may be of epidemiological importance in the study of poliomyelitis.