CASE REPORT

SUBCUTANEOUS RHEUMATIC NODULES WITH NO CARDITIS

BY

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The following case of acute rheumatism in a child with an abundant crop of subcutaneous nodules as the most outstanding feature is unusual in the absence of any evidence of a cardiac lesion clinically or at autopsy. The association of these nodules with other manifestations of acute rheumatism is widely recognized, and was described fully by Cheadle in 1889. Subcutaneous nodules, however, almost invariably occur with carditis, and generally appear late in the course of the disease. In this case the nodules, apart from vague joint pains, were the only definite sign of the rheumatic infection, and at the time of death, seven weeks after their first appearance, there was no evidence at all of cardiac involvement.

HISTORY. The patient, a boy of eleven, was first seen in October, 1935, by Prof. C. B. Perry. For the last month his fingers, wrists, shoulders, back, and knees had been stiff, and he could not run or stoop, but could ride a bicycle. Previously he had had measles, whooping cough, chicken-pox, erysipelas, and bronchitis, and an illness in February, 1935, which was diagnosed as glandular fever.

PHYSICAL EXAMINATION showed a thin, pale boy, but no definite physical lesion could be made out, and the joints appeared normal. He was a highly-strung, nervous child. At this time he appeared well and the history was so indefinite, that he was referred back to his doctor for observation.

FURTHER COURSE OF ILLNESS. Seen later at the end of November the joints of the fingers of both hands were swollen, and rheumatic nodules were present on both elbows. The boy was admitted to hospital on December 2. He was thin and pale. There was an extensive crop of nodules over his elbows, knees, along the extensor tendons on the back of the hands and over both ulnae. His finger joints were slightly enlarged, but they were painless and freely movable. The heart was normal, and no lesion was found elsewhere. During the first twelve days after admission, the temperature rose three times to 99° F., but was otherwise normal. The pulse-rate

ranged from 88–112 per minute. No salicylates were given. The nodules became more extensive but no other lesion developed. On December 13, the patient developed a typical attack of appendicitis, with epigastric pain moving to the right iliac fossa after he had vomited twice. The temperature rose to 100° F. and he was acutely tender in the right iliac fossa. He then told, for the first time, of a similar attack of pain in August, 1935, lasting for some hours. At operation the appendix was found to be thickened, slightly enlarged, and contained some pus. On section it showed evidence of acute inflammation and of changes resulting from the previous attack.

Convalescence was not entirely satisfactory, as there was slight pyrexia without localized signs. The fever continued and was unaffected by the exhibition of salicylates, and no cause for it could be discovered in the heart, chest, or abdomen. On January 8, 1936, an impaired percussion note was detected at the left base with absence of breath sounds. These signs increased, and on January 13 the chest was explored and 8 c.c. of clear yellow fluid were withdrawn. On culture this gave a mixed growth of *B. coli* and pneumococci. The condition of the patient became rapidly worse, with tachycardia, dyspnoea, and cyanosis, but without cough or sputum. He died on January 18. During this post-operative period the nodules gradually disappeared, and at the time of death none could be found.

POST-MORTEM EXAMINATION showed a small retro-caecal abscess containing about a drachm of pus, and two metastatic lung abscesses in the lower lobe of the left lung. The pleura was thickened and contained a little fluid. There was a slight excess of fluid in the pericardium, but the heart appeared perfectly normal macroscopically. Sections of the myocardium and mitral valve were normal, and no evidence of carditis was found.

Summary.

A case of acute rheumatism in a child is described in which there was an unusually heavy crop of subcutaneous nodules without any evidence of cardiac involvement. The patient died of intercurrent acute appendicitis complicated by metastatic lung abscesses. At autopsy the absence of a cardiac lesion was confirmed.

Prof. C. Bruce Perry, under whose care this patient was, has kindly given permission for these notes to be published.