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## **PECTORAL MUSCLE DEFECTS: Cases Illustrating Three Varieties**

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## PECTORAL MUSCLE DEFECTS.

## CASES ILLUSTRATING THREE VARIETIES\*

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Variations in the pectoral group of muscles are by no means rare. The condition usually found in the dissecting room is the absence or variation in origin of one or more heads of the pectoralis major, but the clinical observer, noting those defects which result in more marked deformity, has claimed that a complete absence of both pectoralis major and minor constitutes the most common defect.<sup>1</sup> Christopher<sup>2</sup> in an extensive review of literature on the subject, could find no record of the smaller muscle being absent without accompanying defects of the pectoralis major and concluded that it probably did not occur. It is striking that compensatory action in other muscles always serves to preclude any disability resulting from these deformities.

CASE 1. R. C., a white schoolboy, age nine, was seen during a public school inspection. Asymmetry of the thorax attracted attention to the absence of both of his right pectoral muscles. The anterior axillary fold is directed upward toward the clavicle, being formed by the hypertrophied anterior fibers of the deltoid-eus. The boy is right-handed and suffers no disability.

CASE 2. J. B., white, age eleven, was also seen during a school inspection. The sternal and abdominal heads of the right pectoralis major are missing and the costal portion is represented only by a hypertrophied slip from the second rib which forms a horizontal anterior axillary fold. This boy, too, is right-handed and experiences no disability. (Fig. 1).



FIG. 1

Absence of sternal and abdominal heads and partial absence of costal head of pectoralis major muscle.

\*From the Department of Anatomy, Emory University School of Medicine, and Health Department of the City of Atlanta.

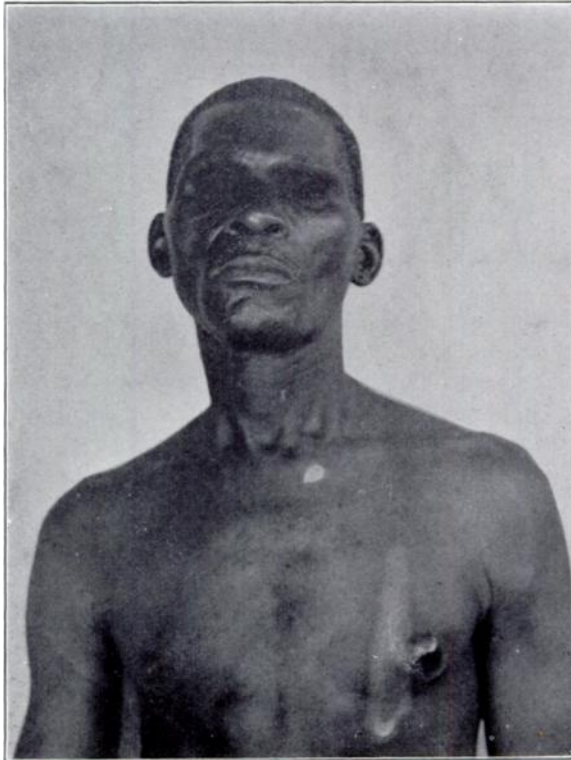


FIG. 2

Absence of pectoralis minor muscle detected at operation. The pectoralis major is normal and forms the usual anterior axillary fold.

phenomena in surrounding structures, results in no appreciable disturbance of function. The third case is of particular interest on account of its rarity, no previously reported case having been found in the literature. The detection of the absence of the pectoralis minor by clinical observation is, of course, impossible in the presence of a normal and well developed pectoralis major.

CASE 3. M. M., colored, male laborer, age fifty-two, was operated upon by Dr. J. L. Campbell at Grady Hospital, Emory Division, September 29, 1924. The Halstead operation for carcinoma of the left breast was carried out, but the pectoralis minor could not be found during the procedure. A careful dissection of the removed tissue also failed to reveal any trace of the smaller muscle. As can be seen from the photograph (Fig. 2) the pectoralis major is normal in every way. The patient was right-handed but had never suspected any disability in his left arm or shoulder.

These cases have been presented because they are examples of a marked variation from the normal human anatomy which, on account of compensatory phe-

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