

been observed upon the right side. In the three cases which I have seen, the first was upon the right side, and the last on the left side; but I cannot now remember on which side the second was. The same author gives this disease the pathological name of Paralysis of the Serratus Magnus; but I refrain for the present from giving it other than the synonym heading this article, as its real pathology does not seem to be entirely agreed upon.

By consulting authors, I have found several notices of this affection, the descriptions of it varying somewhat in each; and by two, at least, the disease formerly supposed to be "dislocation of the lower angle of the scapula over the latissimus dorsi muscle," is considered as a part of this affection.

In the "System of Surgery," edited by T. Holmes, second edition, vol. ii, p. 757, the following occurs in a note following sprain about the shoulder: "In connection with this subject a curious injury may be mentioned, which has been described as displacement of the inferior angle of the scapula over the edge of the latissimus dorsi muscle. . . . Then follows the report of three cases, being all that the writer had been able to coll of *anything analogous to this*, and none of these, he says, did "exactly correspond with the description given by Liston; for although the posterior border and inferior angle of the scapula projected very markedly, there was no distinct account of any injury, and the affection seemed rather to be *paralysis of the muscles* attached to this part of the bone, especially the serratus magnus." "In the last mentioned case," he continues, "the subject was a delicate looking girl of fourteen; the whole of the posterior border of the right scapula was very prominent, and seemed to meet the skin covering it almost at a right angle. The inferior angle projected only a little more than the rest of the border, but the fingers could be passed fairly beneath it. The scapula could easily be pressed into the proper position, but it immediately started back again when left to itself. The motion of the arm was weakened and impaired." The writer further on states as follows: "I have seen a few similar cases. In all, the projection of the lower angle of the scapula was apparently due to atony of the muscles attached to the vertebral border of the bone, and in no instance was there a history of any antecedent injury."

Professor Gross describes a mal-position of the scapula, which he thinks arises from paralysis of the rhomboid muscles, and which, in its semeiology, evidently agrees with the disease under consideration; he holds also that that condition termed dislocation of the scapula, in which the inferior angle is supposed to lie upon, instead of beneath the latissimus dorsi, is frequently of a similar nature and depends upon relaxation of the muscles. Excepting that form of dislocation which depends upon direct injury, the fact seems to be that the "dislocation of the scapula" of the older authors, the affection referred by Gross to paralysis of the rhomboid muscles, and the "angel-wing deformity," supposed by Putzel to depend upon paralysis of the serratus magnus, are varying phases of the same disease.

What then is the true pathology of these abnormal conditions of the scapula? Gross inclines to the view that the chief trouble is paralysis of the rhomboid muscles, the writer in "Holmes' System" that the serratus magnus is implicated as well; and a late case exhibited before the clinical section of the Birmingham and Midland Counties Pathological Society, Nov. 30th, 1883, elicited the following opinions: "Mr. W. F. Haslam showed a patient with an affection of the scapular muscles, which allowed the right scapula to project from the thoracic wall when the shoulders were thrown back. The right acromion was depressed, and the arm could not be raised much above the shoulder. He thought the condition due to paralysis of the trapezius. Mr. Jordan Lloyd believed the rhomboidei were the muscles most in fault. Mr. Bennett May thought the serratus magnus was the muscle paralyzed, and that the lower end of the scapula had slipped from under the latissimus dorsi."—*Brit. Med. Jour.*, Dec. 8, '83.

I have inserted this case here to illustrate the obscurity in which the true pathology of this affection is shrouded. My own opinion is, that the serratus magnus and the rhomboidei muscles must all be more or less paralyzed, to produce the affection in its fully developed state. Paralysis of the serratus magnus alone, while it would permit the vertebral border of the scapula to recede from the thoracic wall, could not produce that outstanding condition of this border of the scapula so characteristic of this affection, because the rhomboideus major and minor would resist it; and not only