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# Excision of the Scapula for Progressive Chronic Interstitial Myositis associated with Obliterating Endarteritis.

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# EXCISION OF THE SCAPULA FOR PROGRESSIVE CHRONIC INTERSTITIAL MYOSITIS ASSO-CIATED WITH OBLITERATING ENDARTERITIS.<sup>3</sup>

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Surgeon to the Pennsylvania Hospital, and to the Orthopædic Hospital and Infirmary for Nervous Diseases.

THE history of this very rare case may be summarized as follows: E. D., aged eight years, colored, was admitted to the Pennsylvania Hospital, December 9, 1901. He had fallen upon his left shoulder two months before. An abscess followed the contusion, and pointed near the summit of the shoulder. After healing, it reopened in a few days, and there remained a sinus, which continued to discharge freely, and communicated with what appeared to be carious scapula. A month later a mass of almost bony hardness began to develop over the body of the scapula, and a skiagraph taken at that time clearly indicated that the mass was in part, at least, composed of bone. Four months later the mass having continued to grow into a dome-shaped tumor, which corresponded in outline to the body of the scapula, the child was etherized, and the scapula excised. Preparatory to the excision, an exploratory incision was made half an inch to the upper side of the inner border of the scapula. A fragment of the mass was removed, and a hasty examination of a frozen section led to the conclusion that the growth was a sarcoma. The operation was proceeded with after the method of Ollier, all of the tissues overlying the bone, except the integument, being removed with the latter. The only detail of the procedure that may be mentioned was the easy arrest of hæmorrhage obtained by getting perfect control of the bone with heavy lion-jawed forceps. In this way, after the superficial attachments had been divided, it was possible to elevate the bone and clearly expose the vessels as they were divided.

The child made an uneventful recovery, there being moderate

<sup>&</sup>lt;sup>1</sup> Read before the Philadelphia Academy of Surgery, May 5, 1902.

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suppuration for a short time, when the wound closed permanently. An examination of the growth subsequently made proved that it was not one of sarcoma, but of progressive chronic interstitial myositis associated with obliterating endarteritis.

Sections through the muscles attached to the scapula show the following condition reported from the Ayer Laboratory:

The muscle-fibres in some sections are separated by a large amount of fat. Between the fat, the muscle-cells lie either in single narrow bundles with proliferation of nuclei and irregular ill-defined striations, or in small masses composed of several such muscle-bundles. In other sections areas of muscle-fibres have undergone complete degeneration, only here and there the nucleus retaining the stain. Between these areas the muscle-bundles are seen, some of them partially degenerated, others small, without striations and showing proliferation of the nuclei. Many of the fibres are broken and curled. In cross-section they bear a close resemblance to epithelioid cells with ingested nuclei. These areas of degenerating muscle are infiltrated with small round cells, epithelioid cells, and a few polymorphonuclear leucocytes. About the vessels are masses of small round cells with deeply staining nuclei. Capillaries are numerous in all these areas. In other sections the complete degeneration of the muscle is not so extensive, and here the masses of partially degenerating muscle comprise the greater portion of the section.

In all the vessels a very marked endarteritis is present, which becomes obliterative in the smaller vessels and almost closes the larger ones.

The functional recovery of the upper extremity eight months after the operation was remarkable. The child could push and pull with the arm with considerable force. His general condition was satisfactory, and there was no sign of recurrence of the disease.

Myositis or inflammation of the voluntary muscles usually occurs as an acute or subacute affection, and is probably dependent on some unknown infectious agent. The cases reported are few in number, and usually, unlike the one described above, have the entire muscular system affected. One of the best papers in recent years concerning the subject is that by Janowsky and Wyssokowicz (*Deutsche Archiv für klinische Medicin*, 1901, lxxi, 493), who, in connection with a case of dermatomyositis, discuss the literature and symptomatology of this peculiar affection. They

called attention to the fact, that it is purely a muscle and skin affection, and that the nerves are never involved in this condition. Of the clinical symptoms the muscle changes occupy the first and most important place. The muscles become œdematous, and may swell so much as to deprive the limbs of all characteristic form. The œdema pits but slightly and the structures do not lose their consistency, this, if anything, increasing in extent. Next to the œdema ranks the pain; this appears very early in the disease, manifesting itself on the slightest motion and pressure. All the muscles of the body may become affected, but oftenest those of the extremities, trunk, and neck; at times, also, the laryngeal, œsophageal, and respiratory muscles, including the diaphragm. After involvement of the pharynx, larynx, and diaphragm the patient usually succumbs, the disease usually lasting from one to three months.

The skin changes are almost as frequent as the muscle changes, and may appear early; they are noted in nearly all cases at some stage of the disease. The cutaneous diseases include urticaria, erythema, erythema contusiforme and nodosum, erysipelatous eruptions and macular exanthemata. The nervous system never manifests any changes, as proven by clinical and pathological examinations. The fever is constant, but extremely variable as to time of appearance and disappearance, intensity and character. It may be typhoidal in character (Senator), or it may terminate by crisis (Plehn). It may last but a day, may be remittent, or rarely there may be no fever at all. Free perspiration occurs frequently. In some cases the spleen is enlarged, in others it is of normal size. In but one case was nephritis reported; in three cases slight albuminuria; in all others the urine has been reported normal.

Concerning the cause of the disease very little is known, but it is probably an infection; the fever, the behavior of the spleen, and occasionally of the kidneys speak for it, but all bacteriological examinations up to date have been negative. The theory of autointoxication has been brought forward by Senator, and their own case with its duodenal ulcers and accompanying dyspeptic symptoms speaks for it; or the disease may begin as an infection and terminate as an autointoxication.

Their own case concerns a twenty-three-year-old peasant woman, in whom the disease began a year before she came under

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observation with pain in both arms, but especially the right one; from there the pain spread to the feet, the back, and other parts of the body. The pains increased in intensity gradually, until all movements become a torture to her. She was forced to stop work and had to go to bed; even such slight exertions as carrying a spoon to her mouth and eating were almost impossible, and swallowing gave her severe pain. There were symptoms of indigestion and constipation. The examination shortly after her admission to the hospital revealed her cheeks, forehead, and upper evelids to be of a peculiar redness, the color of smoked ham. The muscles all over her body, but especially those of her extremities, were the seat of a firm, tense ædema, which pitted but slightly on pressure, and which was at once recognized as an inflammatory affection of the muscles. The articular and periarticular structures were entirely free from effusion, and, but for the pain in the muscles, movements would have been possible. Touch and temperature sense were found to be normal, and no especial tenderness was noted along the course of the nerves, but pressure at any point produced great pain. No tendon reflexes could be obtained, and of the cutaneous reflexes the plantar reflex was the only one present. Oral examination revealed the muscles of the tongue, palate, and pharynx affected with those of the rest of the body. The spleen was greatly enlarged, the temperature slightly elevated, and the urine normal. The patient lingered for a few days; during these last few days of life respiration became painful on account of the muscles of respiration becoming involved (even the diaphragm). The sphincter ani also became affected, and feeding by rectum was made impossible thereby. Severe abdominal pain, vomiting of blackish-green material, and signs of a bronchopneumonia preceded death a few hours. At the autopsy were found hydrothorax, catarrhal pneumonia, atelectasis of the left lung, with splenization of its lower lobe and four duodenal ulcers, one of which had perforated, producing a localized purulent peritonitis; all of these changes seemed recent. The muscles presented the macroscopic and microscopic picture of a chronic diffuse interstitial myositis; they were of a pale yellow color, having the appearance of wax. Microscopically, an increase of the connective tissue between the muscle fibrillæ could be seen; this increase was especially noticeable at the periphery of the bundle, much less so in the centre. By the pressure of this



FIG. 1.—Case of excision of the scapula for chronic interstitial myositis, showing the appearance of the scapula and surrounding tissues as they were removed.



F1G. 2.—Case of excision of the scapula for chronic interstitial myositis, showing the microscopic appearances observed in the muscular tissues.

tissue, atrophy of the muscle-fibres was produced. No change could be seen in the arteries, veins, and nerves, and micro-organisms could nowhere be isolated. Parenchymatous changes, such as are found in acute cases of dermatomyositis, could not be discovered.

In connection with this case, it may be interesting to review the following list of similar operations, the very large proportion of which have been done for sarcoma.

## BIBLIOGRAPHY.

## RESECTION (EXCISION) OF THE SCAPULA.

Cases reported for last five years, 1897-1901. (Those operated on for sarcoma are marked with an \*.)

- \* Clark, H. E. Recurrent sarcomatous growths after amputation of the scapula. Glasgow Medical Journal, 1897, xlvii, 1-4.
- \* Dalizel. Excision of the scapula for sarcoma. Glasgow Medical Journal, 1897, xlvii, 140.
- \* Morton, C. A. A case of excision of the scapula for large cystic sarcomatous growth. Lancet, London, 1897, ii, 188.
- \* Wanach, R. Ein Fall von Entfernung des Schultergürtels wegen Sarcom. St. Petersburg medicinische Wochenschrift, 1897, n. F., xiv, 215-218.
- \* Edington, G. H. Excision of the scapula for sarcoma in the infraspinatus muscle, occurring in a girl aged eight years; recovery with useful limb. British Medical Journal, London, 1897, ii, 457-459.
- Francke, G. Ein Fall von Entfernung des Schultergürtels. Münchener medicinische Wochenschrift, 1897, xliv, 536.
- \* Littlewood. Removal of the scapula for sarcoma. Lancet, London, 1897, ii, 1323.
- \* Warren, J. C. Total excision of the scapula for sarcoma. Boston Medical and Surgical Journal, 1897, cxxxvii, 624.
- Darteques. Tumeur à myéloplaxes de l'omoplate; ablation du scapulum seul et conservation du membre supérieur; guérison. Bull. Soc. Anat. de Paris, 1897, lxxii, 919-923.
- Picqué, L. et Dartigues. Scapulectomie ou ablation primitive et totale de l-omoplate avec conservation du membre supérieur dans les tumeurs malignes de cet os. Rev. d. Chir., Paris, 1900, xxi, 437-488.
- Buchanan, J. J. Total excision of the scapula alone, and with the arm (interscapulothoracic amputation). Partial excision of the scapula for tumor. Philadelphia Medical Journal, 1900, vi, 26-37, 73-82. [Contains six "Tables," cases under different headings.]
- \* Gerster, A. G. Excision of scapula for sarcoma. ANNALS OF SURGERY, Philadelphia, 1900, xxxi, 257.
- \* Moynihan, Berkeley G. A. Case of excision of the scapula for sarcoma. British Medical Journal, 1898, i, 1198.

\* Schmidt, Meinhard. Totalextirpation der Scapula wegen Sarkom. Deutsche Zeitschrift für Chirurgie, Leipzig, 1899, l, 394.

- \* Berger, Paul. Résection totale (extirpation) de l'omoplate et de l'extrémité externe de la clavicule pour un sarcome récidivé de l'epaule droite. Bull. et Mem. Soc. de Chir. de Paris, 1897, xxiii, 571-575.
- \* MacCormick, Alex. Case of recurrent sarcoma of the serratus magnus (excision of scapula). Australasian Medical Gazette, Sydney, 1898, xvii, 295.
- Clark, H. E. Amputation of the scapula for sarcoma with preservation of a useful limb. Glasgow Medical Journal, 1896, xlv, 1-5.

Warren, J. C. A case of total excision of the scapula for sarcoma. Boston Medical and Surgical Journal, 1896, cxxxiv, 511.

- MacDonald, G. C. Total excision of the left scapula for osteosarcoma; recovery with useful arm. Occidental Medical Times, Sacramento, 1896, x, 600-602.
- Shepherd, F. J. Excision of the scapula for sarcoma. Montreal Medical Journal, 1896-7, xxv, 301.
- Cabot, A. T. A case of sarcoma of the scapula; removal of the arm with the scapula and greater part of the clavicle. Recovery. Boston Medical and Surgical Journal, 1896, cxxxv, 411.
- Eliot, E. F. Recurrent myxosarcoma of the scapula in a patient aged seventy-six years; removal of the clavicle, scapula, and arm; recovery. Lancet, London, 1896, ii, 1304.
- Sendler, Paul. Ueber Totalextirpation der Scapula wegen maligner Neubildung. Archiv für klin. Chir., Berlin, 1889, xxxviii, 300.
- Poinsot, G. De l'extirpation totale de l'omoplate avec conservation du membre supérieur. Revue de Chir., Paris, 1885, v, 201-218.
- Van der Hoeven, Jr., J. Een geval van osteosarcoma scapulae. Nederlandsch Tijdschrift voor Geneeskunde. Amsterdam, 1890, xxvi (part 2), 521-524.
- Schultz, W. Zur Statistik der totalen Entfernung des Schulterblattes. Deutsche Zeitschrift für Chirurgie, Leipzig, 1896, xliii, 443-472.
- Périer. Extirpation de l'omoplate. Le Mercredi Méd., Paris, 1890, 2<sup>e</sup> s., xxvii, 51.
- Putti. Due casi di asportazione totale della scapolo con conservazione del braccio. La Riforma Med., Napoli, 1891, Anno vii, v. ii, 271.
- Johnson, A. B. Sarcoma of the scapula (entire scapula removed). New York Medical Journal, 1896, i, 389.
- Brinton, John. Excision of the scapula. Maryland Medical Journal, Baltimore, 1885-86, xiv, 21.
- Chavasse, T. F. ("Removed the entire right scapula of a girl aged twelve for a periosteal sarcoma involving both surfaces of the bone.") Lancet, London, 1892, ii, 473.
- Nixon, F. Alcock. Removal of entire scapula with tumor. British Medical Journal, London, 1881, ii, 1056.

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RESECTION (EXCISION) OF THE SCAPULA FOR SARCOMA.

- Allix, E. Seconde récidive sur place d'un sarcome ossifiant; ablation de l'omoplate. Ann. Soc. d'anat. path. de Brux., 1862, 14-17. 1 pl.
- d'Ambrosio, A. Estirpazione della scapula e resezione dell' estremità scapulare della clavicola, previa allacciatura della succlavia per voluminoso mixosarcoma. . . . Movimento, Napoli, 1880, xii, 321, 393.
- Bell, J. Arm and scapula and clavicle removed for sarcoma from a boy aged ten. Transactions Medico-Chirurgical Society, Edinburgh, 1884-1885, n. s., iv, 175.
- Briddon. Sarcoma of ulnar nerve ending in amputation of shoulder-joint and exsection of scapula. Medical Record, New York, 1878, xiii, 116.
- Conklin, W. J. Periosteal osteoid sarcoma of humerus; amputation at shoulder-joint; rapid recurrence; subsequent excision of entire scapula and outer extremity of clavicle; recovery. American Journal of the Medical Sciences, Philadelphia, 1883, n. s., clxix, 102-107.
- Eder, S. Sarcome in regione scapul. dext; resectio scapulae; von Dumreicher operit. In his Aerztlicher Bericht, 1875, 8vo, Wien, 1876, 121.
- Elder, G. Sarcoma of the scapula; excision of the tumor and portion of bone involved in the growth; recovery with a useful arm. Lancet, Lond., 1885, i, 203.
- Ellison. Excision of the right scapula in its entirety for osteosarcoma involving the venter. Australasian Medical Gazette, Sydney, 1884-5, iv, 39.
- Heath, C. A case of amputation of the arm and scapula for ossifying sarcoma; recovery. Medical Times and Gazette, London, 1884, i, 301.
- Hill, B. Sarcoma of the scapula; removal of the growth together with the body of the scapula; death from septicæmia. British Medical Journal, London, 1880, i, 478, ii, 659.
- Landroitte. Sarcome de l'omoplate; opération; récidive; mort; généralisation cancéreuse. Bull. Soc. Anat. de Paris, 1883, lvii, 538-540.
- Lannelongue. Chondro-sarcome de l'omoplate; extirpation de l'omoplate. In his Leç. clin. chir. 8º., Paris, 1888, 235-247.
- Lange. Amputation at the shoulder-joint for round-celled sarcoma; recurrence of the disease and subsequent removal of the scapula and outer three-quarters of the clavicle. New York Medical Journal, 1889, xlix, 215.
- Maling, E. A. Amputation of arm and scapula for sarcoma. British Medical Journal. London, 1886, ii, 1161.
- Mazzoni, C. Sarcoma fuso cellulare della spalla sinistra; asportazione; guarigione. Clin. chir. (Mazzoni), Roma, 1884, viii-x, 311.
- Nedopil, M. Extirpation der Scapula und eines Theiles der Clavicula wegen Chondrosarcom mit Erhaltung des Armes. Archiv f
  ür klinische Chirurgie, Berlin, 1877, xxi, 849-854.
- Omboni, V. Resezione della scapola per osteo-sarcoma midollare. Ann. univ. di med., Milano, 1874, ccxxix, 554-573.
- Pollock, G. Tumor connected with the scapula; removal of the entire bone. Lancet, London, 1865, ii. 233.

Schneider, R. Exstirpation der linken Scapula wegen eines Sarkoms. Berliner klinische Wochenschrift, 1874, xi, 377-380.

Southam. Excision of the scapula for a sarcomatous tumor. British Medical Journal, London, 1889, ii, 1333.

Southam. Removal of the scapula, together with half the clavicle and the entire upper extremity, for a sarcomatous tumor. British Medical Journal, London, 1889, ii, 1334.

Symonds, C. On a case of removal of entire scapula for osteo-sarcoma in a man aged thirty-four who remained well, two years having elapsed since the operation. Lancet, London, 1886, ii, 819.

Swain, P. Removal of the upper extremity, and later of the scapula and part of the clavicle for sarcoma. Lancet, London, 1887, i, 20.

Walter, A. G. Removal of the entire body of the scapula for sarcomatous degeneration of its structure. British Medical Journal, London, 1858, 225.

Watts, H. Sarcoma of left humerus; amputation at shoulder-joint; removal of scapula; recurrence in loco. St. Bartholomew's Hospital Report, London, 1888, xxiv, 207-211.

Gross, S. D. Sarcoma involving the scapula; excision. Philadelphia Medical Times, 1874-5, v. 264.

Folet. Ostéosarcome de l'omoplate; ablation totale de l'omoplate avec conservation du membre supérieur. Bull. méd. du Nord., Lille, 1893, xxxii, 305-311.

Frank, A. Sarcoma scapulæ sin. recidivum; Extirpation der Scapula; Heilung. Internationale klinische Rundschau, Wien, 1893, vii, 432.

Golding-Bird, C. H. Case of total ablation of scapula for sarcoma; patient shown thirty-one days after operation. Transactions of the Clinical Society of London, 1892-3, xxvi, 242.

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