

to them, namely the walls of the gut. Errors in the secretions of the pancreas, the intestine (succus entericus), the liver (bile), the stomach, etc., are first to take place, and following this the musculature is weakened by a protoplasmic and nuclearplasmic degeneration in the fibers, both coats being involved. Gradually, a degeneration of the sympathetic fibers takes place, and as this extends, the ganglia are involved, showing a granular degeneration and shrinking of this highly specialized tissue. When this is established completely enough, the hollow viscus dilates and elongates, for the inhibitory power of the sympathetic system is assailed. Then usually, all the hollow viscera of the abdomen show this change, although certain parts like the stomach, small intestine, cecum, colon, sigmoid or rectum may show it to a greater degree. After this, the less immunized tissues of the body (those distant from the abdomen) show its influence on them and we have the picture of an individual we so often see in practice. As local resistance of the gut wall is assailed, the bacteria may gain entrance into the general blood-stream, and, filtering out in remote tissue, proliferate there with the production of local pathologic change.

To me, then, the subject is a medical matter all the way through. Surgical procedures for conditions that come on as complications may be necessary in individual cases, but never the major surgical operations of Lane for simple stasis or toxemia, or his form of abdominal operation for disease in tissues remote from the abdomen, or operations on the ileocecal valve itself.

SUBSCAPULAR EXOSTOSIS WITH ADVENTITIOUS BURSA

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A girl, aged 18, came to my office in the early part of last August complaining of dull, aching pains in the left shoulder, increased by wet weather and by use. The pain seemed to run down irregularly through the deltoid muscle and varied much in intensity, duration and frequency. It was never a completely disabling pain. It had been present for about a year and was getting worse. Twelve years ago, following a fall, the left scapula began to become prominent. For this she wore a brace for a year but without any benefit. The projection of the scapula backward is increasing. Just inside the posterior edge of the left scapula a swelling has appeared, varying in size from time to time, but never larger than a lemon. No redness appears over the swelling, which is very slightly tender. Motions of the shoulder itself are painless and unrestricted. The drawing of the scapula backward and forward is slightly painful and for a year the patient has noticed on attempting this motion a grating or creaking sound.

A few months ago the patient went to one of our best hospitals where they inserted aspirating needles into the swelling on the inside of the scapula in several places, with negative findings. She was sent away without any roentgenograms being taken. This was a mistake, for if it had been done, a diagnosis would at once have been made.

Examination.—When the patient was examined, it was at once seen that the posterior edge of the left scapula was very prominent. There was no depression on its inner side as would be the case were the muscles atrophied from paralysis. Instead there was a fulness at the lower part of the posterior edge of the scapula. The color of the skin in this location was normal. Palpation revealed an indefinite, soft, doughy swelling of about the size of a lemon, the edges of which could not be mapped out. There seemed to be a sense of fluctuation in it. It appeared as though it ran forward

beneath the scapula. The feeling was as though a cyst was present beneath the scapula. A roentgenogram was taken, which at once explained the condition. An exostosis (Fig. 1) on the inner side of the lower part of the left scapula was surrounded by an adventitious bursa.

Operation.—Aug. 12, 1914, a transverse incision was made about 1½ inches above the inferior spine of the scapula. It was made transverse so as to afford as little deformity as possible when a low-cut dress was worn. The trapezius fibers were separated in their direction and the rhomboid was divided. Under its surface a thin-walled cyst was found. In the attempt to enucleate this it was ruptured. It

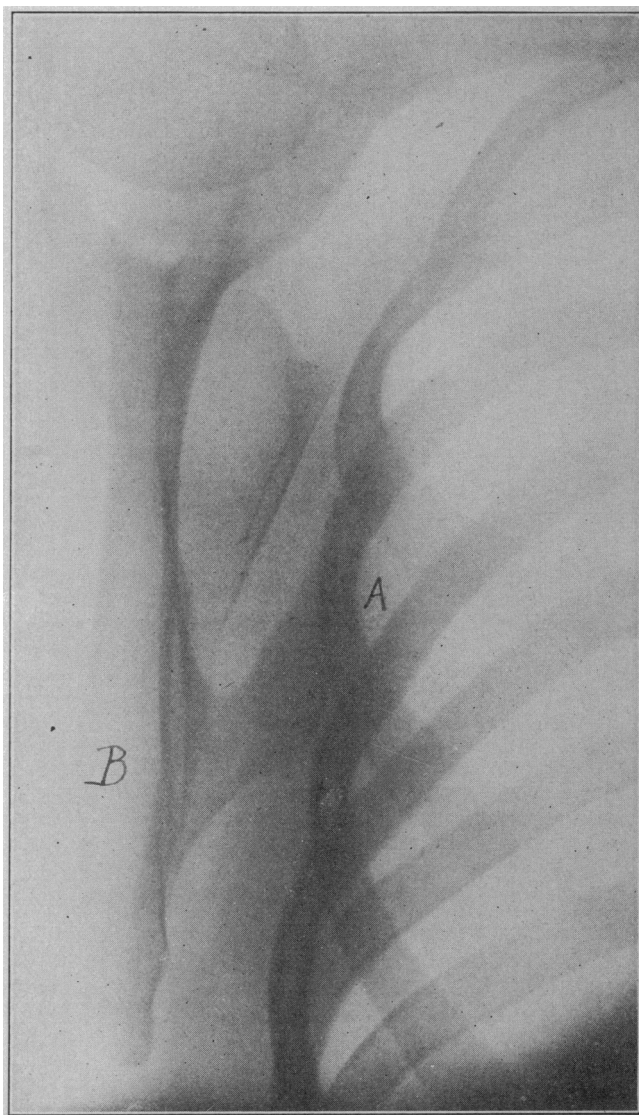


Fig. 1.—Roentgenogram of inner surface of scapula. A, B, exostosis. A is free end of exostosis covered by shadow of rib.

contained serous fluid. The finger inserted came on an exostosis which began about 1 inch from the posterior border and ran obliquely forward and inward. With a chisel it was an easy matter to divide the narrow pedicle at its base. This pedicle was much narrower at its base than at its distal extremity, as shown in Figure 2. The end of the exostosis was irregularly rough. The chest-wall on which the exostosis impinged was very rough and covered with thickened, hard, connective tissue. The bursal wall was dissected out as far as possible, and, in order to obliterate any of the wall which might have been accidentally left, the space was packed with dry, sterile gauze. Separate suture of the muscular layers was made about the gauze.

Pathologic Examination (by Dr. Whipple).—Gross examination: There are two specimens. The first is an oval-shaped piece of bone, measuring 2.05 cm. in one diameter by 2 cm. in the other, and about 1.05 cm. in thickness. Covering it is an irregular patchy area of cartilage which is fairly smooth, with irregular edges. Considerable resistance is encountered on section. The second specimen appears to be the remains of a cyst, covering the exostosis. The cyst-wall is markedly thickened and the inner edges show a considerable amount of infiltrated blood.

Microscopic examination: The sections taken through the exuberant growth of the scapula show that the tissue is made up partly of cartilage and partly of bone. The interesting

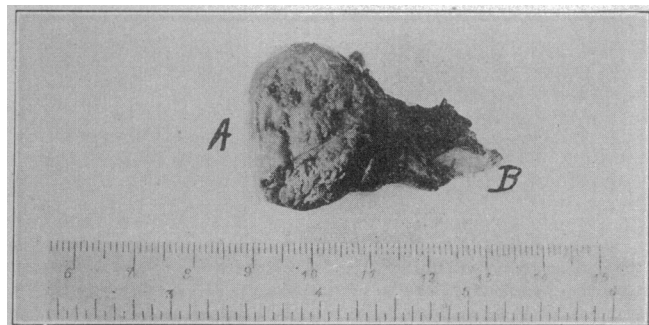


Fig. 2.—Appearance of exostosis after removal. A, free end; B, pedicle.

feature of the section is the picture of metaplasia occurring from cartilage to bone. Covering the cartilage in places is, apparently, a thin layer of fibrous tissue. The sections from the cyst which covered the exostosis show an unusual picture of adventitious bursa, in which the cyst-wall is made up of fairly dense fibrous tissue and the lining of modified connective-tissue cells, the innermost cells being fairly parallel to the surface of the cyst. Diagnosis: exostosis of the scapula with adventitious bursa.

The wound healed by primary union. Two weeks elapsed before the gauze was loose enough to remove. Two months after the operation the appearance of the shoulder is perfectly normal, the scapula having resumed its normal position. The grating sound has disappeared and all motions are painless. This case illustrates the great debt we owe to the Roentgen ray in assisting us with our diagnoses.

32 East Fifty-Third Street.

Harness Rivets Removed from Nasal Cavity.—While we frequently remove from the nasal cavity foreign bodies which have been retained a short time, yet it is rare to find them retained so long without the patient knowing it. A boy, aged 7, had always been healthy until two years ago when he had an attack of "influenza" lasting several days, at which time there was quite a profuse nasal secretion of a thin, watery nature; the general disorder which had been diagnosed influenza subsided, but the nasal discharge gradually got worse until it became purulent and very foul; nasal douching had little effect; "even the skill of the magnetic healer failed to effect a cure." I first saw the child September 20. He was moderately well nourished, was somewhat anemic and presented the appearance of a child with adenoids. A purulent discharge from the nose was very foul. Careful examination revealed a metallic body in each nasal cavity. These were removed with some difficulty and proved to be quarter-inch harness rivets. They were considerably corroded, showing that they had been in place a long time. A few subsequent treatments cleared up the trouble nicely and the boy is now able to breathe through the natural route. This simply emphasizes the necessity of a careful examination of the nasal cavity and all accessory sinuses in every case presenting with a foul nasal discharge.—A. J. DALTON, M.D., St. Joseph, Ill.

New Instruments and Suggestions

NITROUS OXID-OXYGEN ANESTHESIA

A NEW APPARATUS*

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Requirements.—The nitrous oxid-oxygen apparatus used for surgical anesthesia should be simple, portable and readily sterilized.

Simplicity.—Although simple, it must conform to the requirements set by Boothby¹ as follows: (a) an absolutely regular flow of each gas at any rate desired, without the necessity of frequent manipulation of valves; (b) the flow of gases rendered visible; (c) an efficient means of adding ether vapor to any amount; (d) a face-piece air-tight and practically self-retaining.

Portability.—Its portability should be such that it may readily be moved from room to room, or taken in an automobile or railway carriage.

Sterilization.—The sterilization of apparatus for administering anesthetics has been generally neglected. It is evidently wrong to continue to use an apparatus which has been contaminated by use in a case of scarlet fever or tuberculosis. Syphilis could undoubtedly be transmitted by an unclean gas inhaler. No apparatus previously described can be readily sterilized and in most, sterilization would be impossible without destroying the instrument.

Apparatus.—The apparatus here described comprises three units: (1) the reducing valves; (2) the controlling valves; (3) the inhaler.

Reducing Valves.—To secure a steady flow of gas and oxygen, reducing valves are essential. These valves reduce the pressure of 900 to 1,500 pounds per square inch as the gases issue from the cylinders, to a readily controlled working pressure of 10 to 20 pounds. Without reducing valves, constant attention is required to maintain even an approximately regular flow of gas. The reducing valves, one for nitrous oxid and one for oxygen, are mounted on double yokes fitted with fiber washers. Two cylinders of gas and two of oxygen, clamped into their yokes, set on the floor,

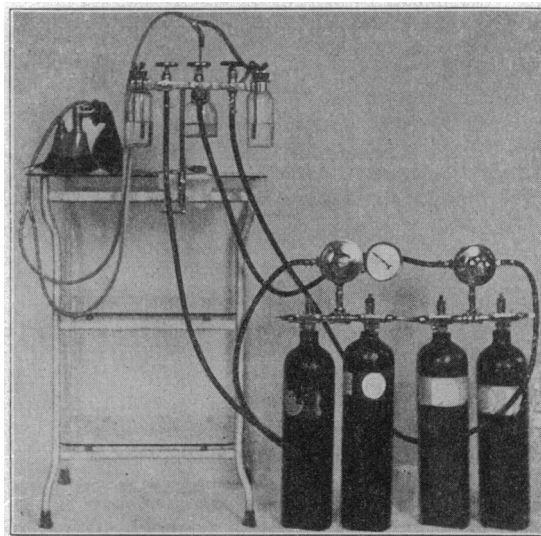


Fig. 1.—Complete apparatus. From left to right: Inhaler, air valve closed. Indicator for oxygen. Oxygen valve. Ether valve and ether vaporizer. Gas valve. Indicator for gas. Oxygen cylinders and reducing valve. Nitrous oxid cylinders and reducing valve.

not requiring any other support. By providing two cylinders of each gas, one is able not only to insure a sufficient supply of the gases for a long operation, but to allow each cylinder to be emptied before a fresh one is opened.

Controlling Valves.—The aluminum frame holding the controlling valves and the indicators is provided with a clamp

* Abstract of a paper read before the Rhode Island Medical Society, Surgical Section, April 8, 1914.

1. Cotton and Boothby: Perfected Apparatus for Administration of Nitrous Oxid-Oxygen-Ether Anesthesia, Surg., Gynec. and Obst., September, 1912.