

## AUTHOR'S METHOD.

Working in view of this importance of preserving these several functions of the inferior turbinate intact, I have for the past six years done an operation simple in itself, but most efficacious in result and permanent in character, with no hurtful sequelæ to mark its performance or mar its record. Only very recently has anything similar been proposed, so far as my reading has informed me. The operation consists in one or more incisions through the mucous membrane of the hypertrophic turbinate well down to the bone, when with a broad nasal saw the bone is cut into to a depth depending on the nature of the bone, whether cancellous or vitreous, which is easily detected by the sensation imparted to the hand. If the bone be hypertrophied and dense the cut is carried well down into its substance. The nostril is next cleansed, the edges of the incised mucous membrane are carefully packed into the osseous cut which, as above indicated has been purposely made with a broad saw to admit of the introduction of the overlapping edges of the soft parts. This adjustment of the tissues is maintained by a carefully placed pledget of cotton saturated in a solution of equal parts of compound tincture of benzoin and flexible collodion. This dressing may remain *in situ* for two or three days when after careful soaking it is as carefully removed. The edges of the incision should not be disturbed when the cotton is removed, else the object of the operation will be defeated. Rarely will repacking be necessary. The direction of the incision will depend on the nature of the enlargement; it may be made from above downward, at the most dependent part of the turbinate upward, or, as is most usually necessary, directly into the body from within outward. It will be found that following this operation much absorption will occur, so that in the course of a short time the nostril will be sufficient for the full performance of its physiologic function.

I have tried the deep incision alone as has been somewhat recently advised, also the removal of a V-shaped section of the mucous membrane side by side with the method I had for so long employed, but it seemed to me that better result was obtained when both the mucous membrane and the bone were included in the incision. The furrow in the bone supplies a base for the attachment of the incised membrane, the firmness of the adhesion preventing the sudden distension so common and troublesome in these hypertrophic conditions.

In conclusion, the advantages of a procedure of this kind over cauterization with either chemicals or electrocautery, as well as the partial or complete turbinectomy, are:

1. Preservation of physiologically active tissues.
2. Freedom from disagreeable reaction or complications.
3. Absence of shock, since but slight local anesthesia is necessary.
4. Freedom from aggravation of existent disease in related cavities.
5. Ease and speed in performance, the instruments used being few and simple.

**Medical Organization.**—Complete organization of the medical profession, wisely guided and administered, will mean for the people better educated and trained physicians; better and more wisely administered public health and sanitary measures; more careful attention to the protection and the saving of human life.—Philip Mills Jones, M.D., in the *Bull. of Am. Acad. of Med.*

## CELLULITIS AND MYOSITIS OF THE ABDOMINAL WALL, SIMULATING INTRA-ABDOMINAL CONDITIONS.

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The cases which follow illustrate very well how closely conditions of the muscular layers of the abdominal wall, accompanied by symptoms most commonly referable to processes inside the abdomen, may be mistaken for the last named conditions.

## CASE REPORTS.

CASE 1.—S. S., aged 18, was admitted to the New York Hospital, Dr. Bolton's service, July 21, 1903, complaining of pain on the right side of the abdomen.

**History.**—Family history negative; past history negative; appetite good; bowels always regular.

**Present Illness.**—One evening, eight days before admission, the patient ate a large quantity of peanuts, cakes, candy and other Coney Island delicacies. The next morning he awoke with pain in his abdomen. At first the pain was diffuse, but later became localized on the lower right side of the abdomen. It was cramp-like in character, the cramps coming in paroxysms. The pain then disappeared for about three days, and the patient was up and about with only a dull ache in the right side. On the fourth day it returned with greater severity and remained localized on the lower right side, which gradually grew tender to the touch. At the onset the patient vomited, and he has vomited at intervals since, but at no time has the vomiting been distressing. The bowels were constipated, but have moved freely by medication. He has had fever, but no definite chill.

**Physical Examination.**—The patient was evidently in considerable pain. The face was flushed, pulse twenty-six to the quarter, good volume, regular in force and rhythm, temperature, 103.6 F. The heart and lungs were normal. The abdomen was slightly distended. The respiratory movements were limited above the navel and absent below it. On palpation the abdomen was everywhere slightly tender. In the right iliac region there was a hard, readily defined mass, extending from the anterior border of the rectus well into the flank and from the level of a line drawn through the navel down to within one inch of Poupart's ligament. This mass was extremely tender, the slightest pressure causing the patient to wince with pain. In this area there was also marked muscular rigidity. Very gentle percussion over the mass elicited a tympanitic sound. Hernial rings and genitalia were normal, and the rectal examination was negative. The leucocytes were 16,000.

The case was diagnosed as acute appendicitis with the formation of an abscess, and the patient was prepared for immediate operation.

**Operation.**—An incision 10 cm. long was made over the center of the palpable mass down through the external oblique where a small quantity of serosanguineous, slightly purulent serum was found on the internal oblique muscle which was edematous and rather markedly indurated. On cutting through it considerable edema and induration was found in the subperitoneal tissue, and the peritoneum itself seemed swollen and edematous. The peritoneal cavity was then opened and the intestines, cecum and appendix found to be uninfamed. As the appendix was a very long one, it was removed. The peritoneum was then carefully closed. The muscular and fascial layers were loosely approximated, a drain was inserted in each angle of the wound down to the peritoneum, and the skin closed loosely with silk.

**Subsequent History.**—The wound discharged a reddish grumous material composed of pus cells and shreds of muscle for about 12 days and the skin wound broke open, the sutures cutting through the skin. This discharge then gradually ceased and the wound rapidly granulated, healing in about four weeks from the time of the operation. The pain disappeared on the second day following the operation. The temperature ranged from 101 to 103 until suppuration ceased and then dropped to normal. The patient's recovery was uneventful.

When he was discharged from the hospital there was no induration nor tenderness in the region of the previously defined mass, and the abdominal wall seemed solid. A culture taken at the time of the operation yielded a pure culture of the *Staphylococcus pyogenes aureus*.

CASE 2.—J. S., aged 19, was admitted to Dr. Bolton's service at the New York Hospital, Aug. 11, 1903, complaining of pain in the lower left side of the abdomen.

**History.**—Family history was negative; past history was negative except for a little pain occasionally felt in the hypogastrium at the end of micturition. There was no hematuria, increased frequency, etc., and patient denied venereal disease.

**Present Illness.**—About four weeks before admission the patient had severe cramp-like pains over the whole lower abdomen, which later became localized in the lower left quadrant and remained dull and aching in character. With these pains he had no chill, nor fever. In a few days he was able to be about again with no other symptoms than an occasional dull ache in the lower left abdomen. Four days ago, however, he was again seized with severe cramp-like pains over the entire abdomen, which later became localized to the left lower quadrant; felt very sick; had a slight chill and was told by his doctor that his temperature was 104 F. This pain also subsided gradually into a dull ache, localized on the left side. He had slight nausea during the last attack, with headache, and a bad taste in his mouth, but no vomiting. The appetite had been good and the bowels regular. There was no pain on defecation and no blood or mucus was noticed in the stools. There were no urinary symptoms other than the slight pain in the hypogastrium at the end of micturition (v.s.) which was no worse during the attacks of abdominal pain. There was no pain, nor swelling of testicles; no lameness nor pain in the back or hip, and no pain on walking or standing. The patient thought that the dull ache on the left side was slightly more marked during the process of assuming the erect posture after bending forward. He had had no night sweats and was not sure, but thought, he had lost some weight and strength.

**Physical Examination.**—The patient was well nourished, the tongue was clean; pulse was 25 to the quarter, of good volume and regular in force and rhythm; temperature, 100 F.; heart and lungs were negative; the abdomen was scaphoid; the respiratory movements were well marked throughout. On palpation the abdomen was soft and nowhere tender except over a small hard mass just outside the border of the left rectus muscle and between it and the anterior superior iliac spine and located about half way above and below a line drawn across the abdomen through the anterior superior iliac spines. This mass was somewhat tender, hard and apparently attached to the abdominal wall. There was no local redness, swelling, nor pitting of the skin, and no palpable local increase in surface temperature. Deep palpation elicited nothing but increased local pain. The genitalia were negative. The rectal examination was negative and a catheterized specimen of urine was entirely negative. Thorough examination of the spine, left hip joint and the left ilium yielded no signs of disease in those localities.

The diagnosis was not clear, but wavered between an intra-abdominal condition and a process local to the abdominal wall. Operation was proposed and accepted.

**Operation.**—An incision four and one-half inches long was made parallel to Poupart's ligament and about three-quarters of an inch above the anterior superior spine through the center of the palpable mass down to the external oblique, which was found to be edematous and grayish white in color. On incising the external oblique parallel to its fibers a small quantity of serum gushed out and the internal oblique was found to be edematous also, hard and indurated, and of the same color as the external oblique. The internal oblique was cut, and palpation revealed no intraperitoneal mass; so the peritoneum was not opened. A piece of muscle was then removed for examination and a culture was taken. The wound was loosely closed and freely drained from both angles.

**Postoperative History.**—For about 10 days the wound discharged a serosanguineous exudate, which never became purulent, and then began to heal rapidly. The urine was negative throughout, and the stools were normal. The temperature

ranged from 99 to 101 F., until the discharge ceased, and then fell to normal.

When discharged from the hospital, there was no induration except that immediately along the line of the scar; and nothing could be felt in the region of the previously described mass. Nor did the patient feel any pain.

The culture made at the time of the operation was unfortunately lost. Sections of the piece of muscle removed showed a chronic interstitial myositis with hyaline degeneration of the muscle fibers, edema of the intramuscular connective tissue and a well-marked infiltration by small round cells and leucocytes.

In the first case the indiscretion in diet; the onset of general abdominal pain with vomiting and constipation; the pain at first general and later becoming localized on the right side, its subsidence after free catharsis and its subsequent return with greater severity and more definite localization on the right side; the coated tongue; fever and rapid pulse; the tender hard mass in the region of the appendix, and the increase in the number of leucocytes: all seemed to point definitely to some acute involvement of that organ. On retrospection after operation the only factors (local redness, heat, swelling and edema) which might have helped in diagnosis, were not present in a degree sufficiently marked to be noted in the examination. The only fact which seemed noteworthy was the very marked degree of local tenderness immediately over the mass proper, a condition, however, not at all incompatible with an acute inflammation in the appendix leading to abscess formation.

In the second case the localization of the pain on the left side, with practically no other features than the slightly increased amount of pain while assuming the erect posture and the increased pain on deep pressure, rendered less liable so radical an error as in the first instance. In this case local heat, redness and edema were looked for definitely and were not found, and retrospection after operation gave no additional data which would prevent an error in diagnosis in a subsequent case of a similar nature. Both cases were similar in the history of their onset and the absence of any explainable etiologic factor. They differed slightly in their subsequent course, Case 1 being the more acute and simulating very closely indeed the features of an appendicular abscess, while Case 2 was more chronic with a quiescent period of a little over three weeks before any acute symptoms returned and presented the features of a more or less chronic condition with acute exacerbations.

#### REVIEW OF LITERATURE.

The literature on conditions of this character is, as far as I could find, rather meager. Fouque<sup>1</sup> describes a case of phlegmon of the aponeurotic and muscular layers of the abdominal wall in a male, aged 57, in which the etiology was not known, but the patient was ill with what appeared to be a grave typhoid until local redness, tumefaction, and swelling appeared in the lower half of the abdomen. This was incised and the pus evacuated, following which the recovery of the patient was uneventful.

Sonnenberg<sup>2</sup> mentions the case of a boy, aged 17, who, while in apparently good health, was seized with severe pain in the right lower abdomen. This gradually subsided but, eight days later, while at stool, he was again seized with sharp abdominal pain and sent to the hospital with a diagnosis of perityphlitis. His temperature was 38.9 C. On the next day the temperature fell to normal and the pulse remained good. The abdomen was

1. Gaz. d. Hôp., Paris, 1884, livi, p. 315.

2. Berlin. klin. Wochschr., xxiv, 1897, p. 810.

soft except for a large hard mass just below the costal margin extending from the right anterior border of the rectus muscle into the flank and separated from the liver dulness by an area of tympany in the nipple line, but continuous with it in the anterior axillary line. At the operation an abscess, the size of a hen's egg, which discharged yellowish-white sterile pus and contained broken down fat and muscle, was found between the external and internal oblique muscles. The surrounding muscle was hard and indurated. The peritoneum was apparently uninvolved and soft, and there was no underlying mass or resistance. Examination of a piece of muscle removed at the operation showed the pathologic features of a chronic interstitial myositis. The patient's recovery was uneventful. The revised diagnosis was chronic interstitial myositis of the external and internal oblique muscles.

Spellissy,<sup>3</sup> in an article devoted to conditions mistaken for appendicitis, quotes the above case of Sonnenberg and a second case (his Case 7) as follows:

J. A. Hopkins in the *New England Medical Monthly*, April, 1900, reports the case of a woman whose past history was not stated and whose symptoms suggested appendicitis. She exhibited pain in the right iliac fossa and suffered from local pain and tenderness. The possibility of appendicitis was kept in mind, but the diagnosis of an abscess of the abdominal wall was made. She was treated expectantly with poultices and the sequel proved that the abscess was limited to the abdominal wall.

Hiller<sup>4</sup> mentions the case of a woman, aged 23, with a tuberculous family history, who complained of occasional pain in the region of the gall bladder for three and a half years. For the past two months the pain had been more severe and there had been an intermittent sense of pressure in the gall-bladder region lasting for a day at a time. During this period of pain the patient had also noticed a tumor in that region which had gradually grown larger. On examination a smooth, somewhat movable, easily palpable tumor, the size of a goose egg, was felt in the gall-bladder region, two fingers' breadth below the costal margin, which seemed to have a thin pedicle leading up under the costal margin and which did not seem to be adherent to the abdominal walls. Operation was done for cholecystitis, but an abscess was found involving the right rectus muscle and infiltrating the adjacent muscles which discharged a thick, greenish pus containing caseous masses and in whose wall there were numerous tubercles. No connection between the abscess and the peritoneum or ribs could be found.

Allison<sup>5</sup> reports a case of tuberculous abscess of the abdominal wall simulating malignant disease of the transverse colon in a colored girl, aged 16, with a tuberculous family history, who eight months before admission to the hospital noticed a tender spot in the abdomen about the navel, when she stooped over the washtub. From that time on the abdomen began to increase in size and sharp pain from time to time shot through it. On examination the patient was quite anemic. There was a tenderness about the navel and for a considerable distance on each side of and below it and a swelling which in its outline resembled an omental or colic malignant growth. At the operation a tuberculous abscess was found between the rectus sheath and the peritoneum which extended from the navel downward and about four inches to each side of the median line. Following a long convalescence, the patient was discharged, well.

In conclusion, I express my thanks to Dr. P. R. Bolton for permission to report the two cases from his service at the New York Hospital.

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## SOME TROPICAL CUTANEOUS ULCERATIVE CONDITIONS.\*

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Under the term tropical ulcers so many types of cutaneous lesions may be included that it will be necessary at the outset to limit my remarks to certain forms of ulcerative process. It seems wisest, therefore, to exclude such forms of disease as tuberculosis, syphilis, yaws and leprosy. I shall confine myself to those described under the names "oriental sores," "tropical phagedena" and "veld sores," and dismiss those which have been less thoroughly discussed with a mere mention.

In studying tropical ulcers we must bear in mind that, under whatever title the processes have been described, there is so great a confusion of opinion with regard to etiology and clinical course and so meager a knowledge of histology that satisfactory classification is well-nigh impossible. This I have endeavored to take into consideration, and have chosen from among the bibliographic materials at my disposal those in which the descriptions are most uniform.

### ORIENTAL SORE.

Since the first mention of this condition by Russell in 1756, many other men have written of it, and considerable literature has accumulated on the subject. Some of this material is valuable, much is not. First observed in Aleppo, from which city it took the name "Aleppo boil," it has since been studied in Morocco, Algiers, Tunis, Tripoli, Egypt, Crete, Cyprus, Asia Minor, Syria, Mesopotamia, Persia, the Caucasus, Turkestan, Afghanistan, Beluchistan, and India. In many of these districts it has acquired different names, usually that of the place at which it is most frequently seen. Thus it has been called the "Aleppo boil," "Delhi sore," "Biskra button," "Sahara chancre," "Afghan plague," "Tashkent ulcer," and so on. It has also taken other names, some descriptive of the lesions, others referring to their duration, while still others, such as the term tropical or oriental sores, are purely general. The latter, because of our present incomplete knowledge of the causation, are most appropriate.

Following Wright's definition, the disease consists of single or multiple focal lesions of the skin, characterized by the formation of elevated, indurated areas, which ulcerate and eventually cicatrize. It is infectious and autoinoculable. Histologically such lesions are characterized by cellular infiltration of the corium and subcutaneous tissue, together with hypertrophy, atrophy and disappearance of the corium.

In 1885, Cunningham observed in the lesions certain bodies which had ameba-like characters and which were spore-forming. To these bodies Firth, in confirming Cunningham's observations, applied the name *Sporozoa furunculosa*. Riehl, however, believed that these appearances were due to cellular degeneration.

The bodies described by Wright in the lesion taken from the face of an Armenian girl were generally round,

3. *Annals of Surgery*, June, 1902, p. 766.

4. *Beitr. zur klin. Chir.*, 1899, xxv, p. 826.

5. *Medical News*, 1891, xxv, p. 217.

\* Read before the Manila Medical Society, December, 1905.