

has been no nausea or vomiting, no chills or fever. She has not lost flesh or strength.

**Physical Examination.**—Well-nourished girl, noticeably lethargic, slow and indefinite in answering questions. Complexion is sallow, pupils equal and react to light and accommodation. Tongue is moist, white and heavily coated. Heavy pigmentation of areolae around the nipples. Nipples not erectile; no secretion expressible; breast flabby. Examination of chest revealed nothing abnormal. Except for uniform bulging in hypogastrium, the abdomen is normal in contour. No pigmentation or striae, no muscular rigidity. A mass, the size of a large grapefruit, is palpable in the hypogastrium; freely movable from side to side, but immovable up or down. Pressure elicits slight tenderness. The surface is stony hard and slightly nodular. No fetal movements; auscultation revealed no fetal heart or uterine souffle.

Vaginal examination under ether showed an intact hymen, small firm cervix, and small hard uterus not connected with the hard, movable mass in pelvis. Adnexa, liver, spleen and kidneys not palpable. No roentgenogram taken.

Our first diagnosis of a possible pregnancy was completely routed by the results of the vaginal examination. By a process of elimination, the three most probable conditions were: (1) a mesenteric cyst; (2) a pedunculated ovarian cyst; (3) a dermoid.

On opening the abdominal cavity it was quickly discovered that none of these were correct, for the mass lay within the ileum some distance from the ileocecal valve. An incision about 6 inches long was made along the border opposite the mesenteric attachment and a large enterolith, lying free in the lumen, was removed. The incision in the intestine was closed by one row of catgut suture buried by silk Lembert suture. Appendix removed as routine and the abdomen closed in layer suture in the usual way. It was interesting to note that the mass lay free in the lumen of the intestine, whose walls were symmetrically enlarged and not sacculated as might be expected. The symmetrical enlargement of the lumen had for these many years permitted the fecal stream to pass by on all sides and thus no obstruction had occurred. The slow growth of the enterolith had made possible the gradual adaption of the intestinal wall to the unusual condition.

Various deductions may be made as to the cause of the formation of an enterolith of such proportions in a patient so young. The original cause, probably, may be found in the course character of the food which formed her daily diet, and in this way she may be compared with the herbivora, but, if this were so, among the people of her native region enteroliths should be more common than I understand that they are. Her melancholia may be a suggestion as to the cause, for it is well known that among the aged insane fecal impaction is common and enteroliths of fecal origin are not rare. Why could not her melancholia be a secondary manifestation, due to a continued low grade of intestinal toxemia? One would expect, if this were the case, that the removal of the enterolith and daily catharsis would in time tend to improve her mental condition. This did not occur, however. On the contrary she became more and more melancholic and five months later was operated on in the City Hospital by Dr. Dawbarn, who removed a small enterolith about the size of an apple. At this time her melancholia was so profound that her attention could be aroused only with the greatest effort.

**Pathologic Report.**—Oblong mass about the size of a grapefruit, dark brown in color, and with a foul odor. On the surface are seen many coarse husks of some cereal. On section no nucleus was found. The entire cut surface presented only coarse husks, seeds and stems of plants. Measurements: 15.4 by 12 by 10 cm. (about 6 by 5 by 4 inches). Circumference: long, 43 cm. (about 17 inches). Circumference: short, 34.4 cm. (about 13 inches). Weight: 945 gm. (about 2½ pounds).

Patient made an uneventful recovery and was later transferred to Bellevue Hospital because of melancholia.

Deductions drawn from these various cases would make the diagnosis of enterolith depend on the following factors:

1. Previous history of (a) habitual constipation, alternating with diarrhea; (b) repeated attacks of hepatic colic; (c) long-

continued diet of food containing a large percentage of indigestible residue; (d) a sporadic "gorge" of some such foods, such as Scotch porridge and especially persimmons, and (e) the observance by the patient of a small lump in the abdominal cavity, freely movable, which gradually increases in size during the course of years, with or without producing symptoms.

2. Present complaint of (a) the onset of symptoms of typical intestinal obstructions, either partial or complete; (b) presence in the abdominal cavity of a hard mass.

3. Laboratory findings which are helpful by their negative rather than their positive results and the presence of excess of indol or skatol and perhaps bile pigments in the urine.

4. Physical examination, which gives the characteristic signs of intestinal obstruction if this be present; if distention is not too great, the presence of the offending mass may be appreciated. Although not pathognomonic, an enterolith presents certain noticeable features, the most prominent of which is the extreme hardness. Its mobility distinguishes it from most new growths, malignant or benign. This fact and its lack of tenderness help to differentiate it from acute or chronic inflammatory conditions, except as secondary affairs.

The Roentgen ray should confirm the diagnosis, or at least be of great assistance both by its positive findings and by eliminating other abdominal conditions. It is to be regretted that a roentgenogram could not have been obtained in the case reported.

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#### AN UNUSUAL COMBINATION OF CONDITIONS PRODUCING APPENDICITIS

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J. R. P., a coal-passer in the U. S. Navy, aged 19, presented himself to the medical officer of the ship at 10 a. m., May 14, 1913, complaining of abdominal pain from which he had suffered since 8 p. m., May 13, 1913. He gave a history of a similar but much milder attack two months earlier. The pain began about the umbilicus but toward morning had become localized in the right iliac region.

Examination revealed a very slight rigidity of the right rectus; no tenderness low in the right iliac region; a distinct tenderness over McBurney's point and great tenderness over a small area above and external to this point. The patient had vomited once during the night. The temperature at this time was 99.2 F. The leukocyte count was 8,200. A diagnosis of acute appendicitis was made, with the prediction that the appendix would be found retrocecal.

The rectum was irrigated; nothing was allowed to be taken by mouth and a hot-water bag was applied to the iliac region. At 1:30 p. m., the temperature remained at 99.2 F.; the leukocyte count was 9,000. The pain over the point above and external to McBurney's point had become intense.

At 2 p. m. the abdomen was opened by McBurney's incision and the cecum found so firmly bound down by a Jackson's membrane, which extended over the lateral and ventral aspects from the caput to the upper third of the ascending colon, that it was impossible to reach the appendix, which was retrocecal, until this membrane had been divided between interlocking ligatures.

After the caput was freed, the appendix, 9 cm. long and 5 mm. in diameter, was found running upward, posterior and external to the colon, completely invested by peritoneum but lacking any mesentery proper, being, apparently, firmly attached to the colon.

The appendix was freed and removed and the stump buried by purse-string suture. As the external appearance of the appendix was normal, search of the vicinity was made for any other cause which might have produced such acute symptoms. None being found, the appendix was opened and a

chicken feather 11 mm. long and 3 mm. wide was discovered lodged in the extreme tip of the lumen. It had entered quill first and the barb of the feather had prevented its extrusion. It was surrounded by a small area of inflammation involving the mucous and submucous coats.

The patient, according to the routine for uncomplicated cases, sat up the following day, walked about and climbed two ladders to a moving-picture show on deck the third night and went to duty on the fourteenth day.

It is surprising that this unusual combination of immobile cecum, with a retrocecal appendix of small lumen, firmly attached to the colon and without a mesentery, had not long ago produced an acute appendicitis, and it is also surprising that an appendix so hampered should have been continuously able to clear its lumen of ordinary fecal content, unless we assume that its small caliber and its position had ordinarily barred access to its lumen until the feather, by means of its shape and the flexibility of its barbs had been able to insinuate itself to the extreme tip.

### COMBINED OXYGEN AND NITROGEN COMPRESSION IN EARLY LUNG HEMORRHAGE

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Since the operation of lung compression with nitrogen gas has become a recognized method of dealing with certain conditions encountered in tuberculosis, we are beginning to realize that this procedure, with some modifications, is applicable to other phases of this disease besides advanced and progressing one-sided lesions.

Hemorrhage from the lungs as the first recognized symptom of a lung tuberculosis is common. Hemorrhage is also common as a serious complication in early cases already under treatment. In either case rest is the most important therapeutic measure and the procedure of resting the diseased lung by compression is so rational, and experience with its use in more advanced cases has been so satisfactory, that there is no doubt that this method of treatment is destined to come into more general use in dealing with early cases, particularly early cases complicated by hemorrhage.

The conditions which present themselves in these early cases differ essentially from those found in patients on whom the therapeutic pneumothorax is usually performed. Pleural adhesions are less commonly found, at least adhesions of sufficient extent and sufficiently fibrous to prevent a successful collapse of the lung. The patient is in a better condition than one wasted by months or years of illness, and rest of the affected lung for a time causes prompt cessation of bleeding and offers a greater hope of recovery than in those who are more advanced.

The permanent and complete compression required when the lung contains cavities and is infiltrated throughout may not be necessary or desirable when the disease is confined to a small area but in constant danger of advancing due to the overwork of the affected organ. A graduated compression, controlled as to duration by mixture of the gases used, seems to offer the best means of bringing about recovery.

Oxygen is absorbed very quickly when introduced into the pleural cavity. Nitrogen is slower of absorption and for this reason is the gas usually used in the therapeutic pneumothorax. Air is almost as quickly absorbed as oxygen and is much more easily prepared for administration than the manufactured oxygen of commerce.

In preparing air for use in this operation it should be passed first through tubes containing cotton-wool, then through one or two wash-bottles of sterile water and lastly through a Chamberland filter into the gasometer.

By making the first compression with air, or with air combined with a small amount of nitrogen, one is assured of a safe compression with danger of gas emboli reduced to a minimum; and also that, if for any reason it should be inadvisable to continue the compression over a longer interval, the lung will soon return to its normal size.

Should it be desired to continue or to increase the compression the following operations may be performed with nitrogen in the usual way.

The following case reports will serve to illustrate the use of this method:

CASE 1.—Miss A. G., ill six months, had a consolidation of the right apex and some infiltration throughout the entire right upper lobe. Hemorrhages occurring at this time, although not severe, were a source of alarm to the patient and 500 c.c. of a mixture of nitrogen and sterile air were introduced into the pleural cavity. As this controlled the hemorrhage and the patient was almost entirely relieved from cough, a further compression with nitrogen was done the following week. The temperature, which constantly was over 100 F. previous to the first operation, came down to normal and has remained so to the present time.

CASE 2.—Mr. B., aged 24, had consolidation at the left apex with a small cavity: There were infiltration and enlarged lymph-nodes at the left hilus with some infiltration extending from the hilus to the base. The patient had had some small hemorrhages and an afternoon temperature of about 101 F. with considerable cough and expectoration. Two days after injection of 400 c.c. of the air and nitrogen mixture the cough had nearly ceased and the temperature returned to normal. Five hundred c.c. of nitrogen were then injected and a full compression obtained which has been continued to the present time.

CASE 3.—Mrs. A. had been ill for a year and a half and had extensive tuberculosis of the left lung with some involvement of the right. Compression was attempted on account of the rapid progress of the disease on the left side with high temperature and severe cough. The patient had suffered much from pleurisy and on the first attempt but 150 c.c. of the air-nitrogen mixture could be introduced. Following this injection she had a good deal of pain due to tension on the adhesions but, as I expected, the oxygen was soon absorbed and on the following day the pain had ceased. Notwithstanding the small amount of compression the cough practically stopped. She rested much better and the temperature, which had been 101 F. and over in the afternoon, went to normal and remained there. Since then compression has been maintained with nitrogen with good results.

It is too soon to offer any opinion as to ultimate results or percentage of cures in early cases treated by this method, but judging from cases under observation the following conclusions may be drawn.

1. Air or a mixture of air and nitrogen is better than nitrogen for lung compression in early cases of tuberculosis complicated by hemorrhage, for the reason that it is more quickly absorbed than nitrogen and the lung quickly resumes its normal size if it seems inadvisable to continue the compression after the hemorrhage is controlled.

2. In case it is desired to continue the compression it is easy to follow the first injection by nitrogen until complete compression is attained.

3. Air is a safer means of compression in the first operation than nitrogen for the reason that if some should escape into the veins accidentally injured in the operation it would be more quickly absorbed and the danger of gas emboli decreased.

4. A partial collapse is effective in controlling hemorrhage, and the primary operation with the air or air-nitrogen mixture is more simple and better adapted to the treatment of early cases than the more lasting nitrogen compression.

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**Intractability of Hysteria to Treatment, or Can an Ethiopian Change His Skin?**—There are few diseases in which I feel more powerless than in hysteria. I would rather have a case of phthisis in an early stage to cure than hysteria. But the public does not think so: the public regards hysteria as a piece of factitious trumpery which a woman can be scolded or drilled out of. I wish, indeed, it were so.—T. Clifford Allbutt, in (London) *Clinical Journal*.