Sensory Disturbances in Chronic Visceral Disease

PART II.

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CERVICITIS:

In many respects cervicitis is the counterpart in pathology of prostatitis. Just as anatomically the prostate gland harbours the rudiments of an embryonic uterus, so uterine myomatosis may depend on endocrinological factors comparable to those which result in prostatic hypertrophy. Even in respect of their neural symptoms, as with regard to their general symptoms, prostatitis and cervicitis are comparable.

Pain is thus experienced over the lower medial parts of the groin and referred down the front of the thigh. It may be indicated along the cruro-perineal groove, and thus traced posteriorly as far as the gluteal fold. It is most intense over the medial half of the inguinal ligament and over the anteromedial upper thigh. Posteriorly it is reported over the lower sensitivity is often recorded near the groin, in the upper hypogastrum and lower umbilical areas, over the medial upper thigh and above the ischial tuberosity. It seems, however, that the extensive field involved in the hyperesthesia implies that other pelvic organs are secondarily affected in most cases of cervical inflammation. And the pelvis is far from being a barrier to frustrate any tendency to dissemination of infection from the cervix, for it is provided with ideal lymphatic channels to facilitate such a spread.

SALPINGO-ÖSOPHORITIS.

Lesions of the Fallopian tubes or ovaries should be readily diagnosable by the expert gynecologist. But it may occur that such lesions are overlooked by the less skilful, and then the patient may remain a source of perplexity because reputedly gynecologically "negative". In such and other cases the correlation between pain, tenderness and hyperesthesia may assist diagnosis.

Pain in salpingitis is thus experienced mainly in the hypogastrum. When the brunt of the disease process falls on the ovary pain tends to be of a shearing character, and to be referred to the iliac fossa with radiation upwards to the epigastrum and downwards in the direction of the knee-joint. While the pain of salpingitis also radiates to the back over the upper sacrum, lower lumbar region, and sacroiliac joint, where it may be most acute, no such pain was recorded in association with uncomplicated ovarian pathology. In the latter case, on the other hand, pain was sometimes found to be referred to the heel.

Tenderness over the hypogastrum is usual in salpingitis. But it is most marked on bimanual examination, when the affected organ may be identified. The ovary may thus be discovered, and pressure on it characteristically causes pain to radiate upwards to the umbilical area. There is no tenderness over the back.

The hyperesthetic area corresponding to salpingitis is distributed to the lower umbilical quadrant and the lumbar region. There is also a hyperesthetic area across the back overlying the 2nd, 3rd and 4th lumbar spines and extending laterally to the iliac crest. Hyperesthesia is also demonstrable over the latero-anterior thigh in its middle half, extending obliquely medially across the knee to the medial surface of the calf. But the most constant and marked hyperesthesia...
is found over a circumscribed area with centre at the point of intersection between the mid-clavicular vertical and supra-cristal horizontal guide lines. In oophoritis or other specifically ovarian pathologies causing capsular tension, the hyperesthetic zone is focussed on a point quite close to and slightly below the umbilicus, while small hyperesthetic bands may be displayed across the iliac crest and over the lower posterior ribs.

**APPENDICITIS:**

This disease is much too lucrative a source of income in private practice ever to be entirely eradicated. And penicillin treatment may prove even more profitable than laparotomy.

The operation for "chronic appendicitis" may of course do some good by confining the patient to bed and a regulated diet for a short period, during which a long-persistent ureteritis, for instance, may commence to heal.

**Fig. 6.—Salpingitis (right); Oophoritis (left).**

**Fig. 7.—Chronic Appendicitis.**
And the actual surgical procedure has been so refined by unrestricted practice on normal subjects that it is almost without risk of immediate danger or remote complications. But the erroneous diagnosis of chronic appendicitis is a source of expense and unnecessary work in Benefit Society practice, and will become so in a State Medical Service. It is also a pity to go spoiling beautifully smooth abdomens, though many a patient, in whom the diagnosis has been suggested, would rather have a disfiguring scar than carry the mental burden; they do indeed become hypochondriacal unless they can be relieved of their misery by an unnecessary operation.

In the rare genuine cases of chronic appendicitis I found the pain to be localised to the upper right iliac fossa and lower right lumbar area with extension from here backwards to the region of the lower attachment of the quadratus lumborum muscle. This pain was aggravated by constipation, and an element of typhilitis could never clearly be excluded. In addition, colic was periodically referred to the peri-umbilical area, and two of my patients had been repeatedly radiographically examined for possible Meckle's diverticulum.

Tenderness could be fairly precisely localised to McBurney's point, but extended downwards into the pelvis as well. Pressure at this point also caused colicky pain at the umbilicus. A positive Rovsing sign could be evoked by pressure over the sigmoid colon. But pain was also produced in the right iliac fossa by pressure over the splenic and hepatic flexures. In addition, pain in the right iliac fossa was elicited by vaginal examination. There was also tenderness above the right iliac crest, more or less over the lumbar triangle of Petit.

The hyperesthetic zone was characteristically limited in extent and could be defined across the right iliac triangle and lower hypogastrum, being maximal at a point well medially to the mid-clavicular line and just below the level of the anterior superior iliac spines. The area of hyperesthesia thus occupied only the lower third or less of Sherren's triangle. Ligat's method of eliciting the hyperesthesia was found to be less reliable than stroking the surface of the skin.

**Colitis:**

For the purpose of this paper I include under the above heading all forms of chronic symptom-producing lesions within the colon, whether these be merely spastic, reflexive states or actual chronic infiltration of the large bowel in response to bacterial and protosol agents, the main purpose of my study being to show which symptoms and signs necessarily indicate the colon as the seat of disease; more precise diagnosis is then possible by means of barium meal and enema radiography, sigmoidoscopy and clinical laboratory tests.

The whole colon may of course be the seat of disease. But often the brunt of the affection falls on the cecum and lower ascending colon on the right, and particularly the descending and sigmoid colon on the left.

Pain has a characteristic distribution. It is marked in the left and right flank and over both iliac crests and on the left extends forwards across the anterior superior iliac spine and inguinal ligament to the upper anterior and lateral aspect of the thigh. It is most marked in the lumbar area and along the groin. Pain is also referred backwards to the left glutal region, the greater femoral trochanter, the ischial tuberosity and the hip-joint, and radiates downwards on to the posterior surface of the thigh, to beyond the popliteal fossa, into the left lateral calf. The lower field may be more of an unpleasant paresthesia than actual pain. And sometimes the patients complain of numbness down to the back of the leg. Pain is also referred to the coccyx and perineum.

![Image of Chronic Colitis](image)
aspect of the leg and the heel. It is most marked over the greater trochanter and along the upper midline of the posterior surface of the thigh.

danger, and the diagnosis is thus made with greater circumspection. Yet, I believe that if greater attention be paid to the comparative features of other chronic abdominal pain-

**Fig. 9.—Chronic Cholecystitis.**

**Fig. 10.—Gastritis (left); Duodenitis (right).**

**Cholecystitis:**

Next to appendicectomy comes cholecystectomy as probably the most favourite operation for chronic abdominal symptoms, though it is not quite so popular, being fraught with greater producing pathologies, gall-bladder disease will be even less often diagnosed and many mutilating and risky operations prevented.

The classical symptoms of cholecystitis are well known
The importance of strict attention to these signs has been emphasised in my series of cases. Pain is thus practically confined to the right hypochondrium and is described as radiating backwards. Pain is felt over the right posterior inferior ribs and as far upwards as the inferior angle of the scapula. Pain may be referred to the supravclavicular and supra-ascapular areas as well. But its points of greatest intensity are over the anatomical site of the gall bladder and just below the inferior angle of the right scapula.

Tenderness is marked over the right hypochondrium, and its central point over lies the tip of the ninth costal cartilage. Murphy's breathing sign, however, is not always present. Tenderness is also recorded over the 7th, 8th and 9th dorsal spines.

Hyperesthesia is confined to a band descending obliquely downwards and outwards from the 7th, 8th and 9th thoracic vertebral spines over the lower axilla, below the breast, and as far as the mid-epigastrum. The hyperesthesia is most distinct in the axilla, and over the ninth rib posteriorly; thus not sufficient to elicit Boas's sign to diagnose chronic cholecystitis, as hyperesthesia over the lower ribs is present in other conditions as well. It is necessary to demonstrate the disposition of the hyperesthetic zone over the entire seventh, eighth and ninth dermatomes.

GASTRO-DUODENITIS:

The suggestive relationship of pain to other dyspeptic symptoms and the evidence of radiography and gastric analysis may be sufficient to enable the diagnosis of chronic gastritis or duodenitis to be made. But this diagnosis is often made without having recourse to these accessory diagnostic aids. Indeed, the diagnosis is made so often that it seems probable that it is frequently confused with the other pathological states already discussed. And as their recognition is perhaps of the greater urgency, I have attempted to define the gastritis-duodenitis neuro-visceral syndrome as precisely as possible, in order to have adequate grounds for differentiation. It must be observed, however, that duodenitis and gastritis may be two entirely separate conditions. They are treated as one here, because they often occur together, are comparable and related pathologies, and differ somewhat in respect of the relationship which their respective symptoms bear to the body symmetry. Thus gastritis causes disturbances to the left of the mid-line, while duodenitis mainly affects the right half.

Both cause pain in the epigastrum, which radiates upwards and laterally into the thorax in gastritis and also extends towards the left hypochondrium, where it may be a source of constant irritation. In duodenitis the pain radiates to the right hypochondrium. Some pain is experienced posteriorly over the 10th to the 12th thoracic spines in the latter condition. When hypertrophic chronic gastritis is present pain is often referred to the lower left scapular area with emphasis on the subscapular point.

Tenderness over the mid-epigastrum and left hypochondrium denotes gastritis. When most marked over the lower right hypochondrium and epigastrum, duodenitis may be present. There is some tenderness of the upper lumbar spines in duodenitis, while tenderness may be present over the 6th to the 8th thoracic vertebral spines in gastritis.

Hyperesthesia over a broad band extending between the 6th and the 9th thoracic spines downwards over the left lower axilla, over the left breast in females, and into the epigastrum is found in association with gastritis. In cases of duodenitis the area of hyperesthesia is much less extensive, but more circumscribed and constant. Thus a small circular patch may be discovered above and laterally to the umbilicus and posteriorly a small oblong area may be defined over the ninth rib.

(Tom to be continued.)

American Relief for Holland Incorporated, an American relief society, announced recently that the largest consignment of protein hydrolysates used in the treatment of advanced starvation has left an American port for Holland. The shipment contained nearly six tons of the chemical, enough to save the lives of 2,000 Netherlands.

Closed Head Injuries

A NOTE ON THE INDICATIONS FOR EXPLORATORY SURGERY.

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The indications for surgical exploration in cases of closed head injuries are generally based upon signs of retrogression occasioned by increasing intracranial space-occupying lesions. The diagnosis of retrogression depends largely upon two groups of clinical evidence: that concerning the muscular state and, secondly, the mental state. There are other evidences of value in assessing progress, e.g. pupillary signs; temperature, pulse, and respiratory changes; blood-pressure records; and cerebrospinal fluid pressures and content. Their observation in relation to the progress of a case of closed head injury is of importance, but, because of compensatory mechanisms, their diagnostic value is of minor significance as compared with that provided by the main groups of muscular and mental signs.

An increase in the degree and extent, or a delayed onset of paraplegia or paralysis, is the evidence of deterioration provided by the muscular system. The second main group of signs, i.e. those referable to the level of conscious activity, has come to be regarded as the most delicate clinical index of improvement or retrogression; and evidence of deepening of clouding of consciousness, or its onset after some delay during which there is absolute or relative mental lucidity, is the urgent indication for operative interference.

It is the purpose of this note to show that even in the presence of improvement in the mental state there are occasions when surgical exploration is of value.

The following are the notes, in brief, of three illustrative cases.

CASE 1:

A. M., a native male, aged 31, was admitted to hospital about two hours after falling from a moving car. Witnesses reported that he had been unconscious from the time of the accident.

In hospital he was semi-comatose—i.e. he responded only to painful stimuli; there was a haematoma over the occiput, and blood issued from his nostrils and mouth. He also had a hæmopneumothorax with a fractured rib. There was nothing abnormal on examination of his cranial nerves and motor system. X-rays of his skull did not show any fracture. On lumbar puncture, the C.S.F. pressure was 280 mm., the fluid being frankly bloody.