RECENT LITERATURE.

CRITICAL SUMMARIES AND ABSTRACTS.

MEDICINE.

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DIAGNOSIS OF GASTRIC CARCINOMA.

In view of the success with which modern surgery is handling this disease, the earliest possible diagnosis becomes of ever-increasing importance. Kast¹ believes that the general practitioner is far too loth in suspecting the presence of cancer in the stomach, so that many cases which are at first of a curable nature become inoperable by the time a diagnosis is definitely formed. In a patient who develops stomach symptoms between 40 and 70, this disease should always be kept in mind, and the points to which he believes special attention ought to be directed are—active peristalsis, the stomach tending in the early stages of the disease to empty itself more speedily than normal, though atony appears later; the microscopic findings of tissue fragments in washings from the fasting stomach; the gradual disappearance of hydrochloric acid from the gastric juice; the appearance of lactic acid, with lactic acid bacilli; the Salomon test; the chemical proof of the presence of occult blood in the stools; and, finally, if these are not sufficient to establish a diagnosis, the progressively downward tendency in a suspected case observed over four weeks. Other observers have recommended also the examination by radioscopy of the shadow produced by a meal containing a large dose of bismuth, which tends specially to adhere upon the uneven surface of the cancer and produce a deeper shadow in one spot.

Salomon's test is described and discussed by Mathieu.² It depends upon the fact that ulcerated mucous surfaces—in this case the surface of the carcinoma—secrete quantities of mucin, serum-albumin, and nucleo-protein, which can be detected. The stomach of the suspected case is well washed out in the evening, and in the morning the fluid which the organ contains is drawn off and tested with the ordinary Esbach albuminimeter. Mathieu's conclusions are that the occurrence of a large flocculent precipitate of albumin, when the picric acid solution is added, is an almost certain sign of cancer, although the absence of any such precipitate does not exclude the disease in an early, non-ulcerated state.
Examination of the stools for blood is believed by Cade to be the most important of all diagnostic and especially of chemical investigations for stomach cancer. It has proved positive in almost all the cases examined by him. The blood is found in nearly every stool passed, with occasional periods of short intermission. Accordingly, if the stools in a suspected case be regularly examined for blood with negative result, the presumption against carcinoma is exceedingly strong. The standard guaiac test is recommended by Dreyer to be performed in a special fashion. He saturates a piece of white blotting-paper with ozonised turpentine, pours upon it an ethereal solution of guaiac resin, and dips it into the fluid to be examined. Ohly gives a detailed description of the guaiac and aloin tests which he combines in this examination. Csepai uses the spectroscopic method after reducing the blood in the feces by means of pyridin and ammonium sulphate—a procedure by which, he says, the test is rendered ten times as delicate as the ordinary spectroscopic examination.

Lactic acid bacilli, known also as Oppler-Boas bacilli, have long been recognised as bearing a special relation to carcinoma of the stomach, and are characterised by their long, thread-like form, and by the fact that they contain granules which stain with iodine. They have recently been subjected to exhaustive examination by Fricker, who finds that they occur in subacid states of the stomach, but also elsewhere in the intestinal tract; they do not proliferate in the stomach, however, unless there is retention of the subacid contents in consequence of atony or dilatation. This combination of defects is, in the majority of cases, due to carcinoma, so that their presence in large numbers may still be accepted, like the occurrence of lactic acid, as a valuable sign of this disease. The examination, moreover, is an easy one, for which the smallest quantity of material adhering to the stomach-tube or of vomited matter suffices.

Absence of hydrochloric acid offers a question of great complexity; for though this test is a most valuable one, it is very fallible unless interpreted with discretion and with reference to the circumstances of the individual case. There was a tendency some years ago to attribute to the absence of HCl an almost pathognomonic value in the diagnosis of gastric cancer, but many other states are known to cause it. The writer of this summary has found that patients reduced to a state of low vitality by privation and underfeeding, and admitted to hospital suffering from various conditions, but especially from diseases of the nervous system, like tabes, very commonly show at first an absence of HCl, which, however, soon reappears in the gastric juice under improved conditions of rest and feeding. Eisenhardt has made a special investigation of the stomach functions of habitual drunkards, and while the power of the stomach to empty itself normally was retained in most cases, it was very common to find the gastritis from
which the patients suffered characterised either by complete absence
or by great diminution of HCl. Further, many cases are found, quite
apart from alcoholic abuse, which present no recognisable gastric juice.
Faber has investigated 112 cases of this achylia gastrica, and finds
most of them associated with anæmia, as a rule of an unprogressive,
secondary type, though in about 10 per cent. of cases the anæmia was
of a typical pernicious type. Stockton also has dealt with a series
of 132 such cases; in some he observed a slow recovery of the power
to secrete a normal gastric juice, and about 16 per cent. of his cases
gave the blood-characters of pernicious anæmia; a curious feature
which he found in many of these cases was that the administration of
hydrochloric acid was very badly borne. As one would naturally
expect, the mucous membrane of a stomach in which the functions
depart so far from what is usual shows considerable histological change.
Faber and Lange, having made extensive microscopic investigations,
find that these changes may vary from destruction of the glandular
structure in patches to a complete atrophy of the entire mucous
membrane. An answer to the interesting question of how far such a
condition predisposes to the development of gastric cancer has been
the task which Jüngerich set himself. It is clear that if most of
these cases proceed to either of the serious states found in pernicious
anæmia or gastric cancer, then the absence of HCl regains its former
position as a sign of the gravest import. But, setting aside cases of
anæmia, Jüngerich found among 50 cases of stomach carcinoma that
these had developed from a state of complete health, so far as the
stomach was concerned, with no previous defect of gastric secretion;
on the other hand, 32 persons of over 40 years who came under his
observation with a very long history of suffering from the symptoms
consequent upon an absence of the gastric juice showed no sign of
developing a malignant tumour. One must, therefore, not assume that
these cases in which HCl is absent pass on later to carcinoma; and,
when this disease is suspected, the absence of HCl must simply be
weighed along with the other physical signs, regard being had to the
possibility of its former absence.

A simple method of gauging quite roughly, but without any dis-
comfort to the patient, the activity of his gastric juice, has been devised
by Mennier, as a modification of Sahli’s desmoid test with a capsule
containing methylene-blue. Drops of ether are enclosed in a minute
rubber bag, the mouth of which is secured by a thread of raw catgut
of definite thickness, and when this is digested in the stomach the
ether escapes, is quickly vaporised, and causes an eructation unmistak-
ably recognised by the patient. The value of this method has been
tested by Marenduzzo, who finds that it gives information only of
a very rough nature, for even in healthy persons the ether-eructation
appears within such wide limits as from 40 minutes to 3½ hours, while
in the same person at different meals considerable variations in the
time required for digestion of the catgut string are found.

Röntgen-ray examination of the stomach after administration of
bismuth continues to add to our knowledge with regard to carcinoma
and other affections. The observation of a specially dark patch in
ulcerated carcinoma has been already mentioned. Schlesinger and
Holst have made observations as to the position of the pylorus in
relation to the rest of the stomach, and find that, under normal
conditions, it is not, as often supposed, the lowest point, which is
situated, in health, a little distance to the left. Hürter gives a
brief account of the history of stomach examination by this means and
an extended description of his own recent investigations on the subject.
He mentions, à propos of the large doses (30 to 40 grms.) of bismuth
subnitrate commonly administered for the purpose of producing a
shadow, three cases of fatal poisoning and several less serious instances
of its evil effects. This fatal result is generally attributed to the
action of the nitrate or nitrite evolved from the drug, and, if so, can
be avoided by using, as most workers on this subject now make a
practice of doing, the carbonate of bismuth instead of its subnitrate.
Magnetic oxide of iron in powder has been recommended, but, in
several of the cases where Hürter has used this, disagreeable symptoms
of gastric irritation have been set up. Hürter’s practice, accordingly, is
to give a cachet of 1 to 2 grms. bismuth carbonate, to watch its
descent with the screen, and follow this up by 15 grms. of bismuth
stirred up in 50 c.c. of water. This serves to show in a general way
the position of the stomach, presence of peristalsis, &c., and more
definite information can then be obtained as to its size by the
administration of Rieder’s test meal, consisting of 500 grms. of
potato purée, milk, &c., containing 30 to 40 grms. of bismuth carbonate.
If there is any likelihood that the bismuth will be retained in the
intestine for a lengthy period by stenosis, &c., or if there is any
ulceration of the bowel, this writer removes the meal by lavage after
the Röntgen-ray examination has been made, so as to prevent any
chance of disintegration and absorption of the bismuth salt.

Diabetes Insipidus.

Diabetes insipidus is a condition which is capable of causing great
distress and discomfort to a patient, even if he does not show the same
downward tendency as a person suffering from the glucogenic type
of the disease. Recent investigation of the disease has shown the
importance of recognising a type dependent upon nervous system
affections, organic or otherwise, a type dependent upon syphilis, and
a so-called idiopathic type. In the last-named set of cases, Tallquist,
Bräuning, and others have directed attention to the “concentration
power” of the kidney, and the great amount of alleviation that may be got by using a salt-free diet when this power is found to be retained. The healthy kidney possesses the power, when an excess of some soluble substance is present in the blood, to excrete this specially, and without extracting a great excess of water to produce a urine of high specific gravity. In diabetes insipidus this power is more or less lost, and when a special amount of solid has to be excreted this is effected only by dehydrating the tissues generally, while the urine, increasing in amount, remains of the same low specific gravity, and still greater thirst is induced. Bräuning found that in eight out of eighteen cases great benefit was obtained from a salt-free diet. As to the method of procedure in any given case, Minkowski 18 recommends giving at first an excess of salt without an increase of water, and observing whether the effect, on the one hand, is to augment the quantity of urine or, on the other, to increase the specific gravity and chloride content. If the increase of specific gravity and of chloride present in a sample shows that the “concentration power” is still retained, one may attempt to treat the case by reducing the amount of water drunk. If, on the other hand, the quantity of urine is increased by the added salt ingested, then one should prescribe a restriction in the salt and nitrogenous articles of the diet.

The Hypophyseal Adiposo-Genital Syndrome.

Two papers by Launois and Cleret 19 have for their object to show how lesions of the pituitary gland, associated with developmental, pathological, or functional troubles of the genital apparatus, produce in the connective tissues an enormous deposit of fat. The authors, admitting our complete ignorance of the physiological relations that may subsist between the genital organs and the hypophysis cerebri, content themselves meantime with describing briefly the features presented by twelve cases of disease showing the three general characters mentioned above, and give to such cases the general name of this syndrome. The cases affected comprised six women, two girls, three men, and a boy, and presented features suggestive of acromegaly on the one hand and features suggestive of Dercum’s disease on the other. Twenty figures are given in the text, which help to convey a clear impression of the syndrome. As regards the fat deposit, it is general, both on the surface and in the body cavities, and enormous in amount, so that one woman weighed 155 kilos. The signs of sexual dystrophy varied, but were, generally speaking, those of arrested development, while the pituitary body was found to be much enlarged, or the seat of tumour formation. Microscopic examination of the genital and pituitary glands is, in most of the cases, still wanting.
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Surgery.

Remarks on Traumatic Coxa VarA and its Treatment.

Royal Whitman (Zentralbl. f. Chir., No. 11, 1910), in discussing coxa vara, refers to the designation by this term of a number of conditions differing in their etiology, and enumerates five groups of cases which are so classed. He holds that cases due to fracture of the neck of the femur or to separation of the epiphysis of the head in the non-rachitic should not be designated coxa vara, for it is necessary to distinguish clearly between deformities due to rickets and the results of trauma in selecting appropriate methods of treatment.

Whitman’s work has chiefly been directed to the study and treatment of fracture of the femoral neck in children and the resulting deformity. Observation of more than fifty cases has convinced him that the femur commonly breaks through the neck in children as well as at the epiphysial line of the head. The two groups of cases may be distinguished by the facts that when the neck breaks the symptoms are most marked at the time of the accident, and gradually improve, leaving behind only the disturbance due to the altered contour of the neck. When, on the other hand, the lesion is at the epiphyseal line, the original trauma is often slight and the initial symptoms little marked. The joint cavity is, however, necessarily involved, and the functional disturbances often gradually increase, so that cases are often regarded as instances of tuberculous disease.

When the neck is broken the treatment is relatively easy, and consists in applying traction, abduction, and slight internal rotation with fixation in that position till healing takes place. Old cases require a previous linear or wedge-shaped sub-trochanteric osteotomy.

When there is epiphysial separation, it is necessary to employ forcible movements to disengage the fragments thoroughly before cor-