

emulsion to form. To this is then added, drop by drop, 0.8 c.c. of chemically pure sulphuric acid. Should no colour appear immediately the test-tube is again shaken gently, when invariably some coloration takes place. A positive result is constituted by a very definite lilac colour.

Results are tabulated, the headings of the table being: Sex, acetic anhydride test, physical characters, cells, total protein, Nonne-Apelt, Pandey, Lange, and Wassermann reaction in cerebro-spinal fluid and blood.

The cerebro-spinal fluids are from cases of general paralysis (16), of tabes dorsalis (6), of other forms of syphilis (4), of various other organic nervous conditions (18), and of non-organic conditions (6).

The authors conclude that the acetic anhydride reaction cannot be associated with any single one of the usual syphilitic reactions or with any known combination of these, and that the "causal factor" of the reaction must be some other substance in the fluid than that producing the syphilitic reactions. "The suggestion that it may be due to an increase in the cholesterol content of the fluid appears a possible explanation." A positive reaction occurs in practically every case of dementia paralytica, and may occur in secondary neuro-syphilis. Cases of cerebral degeneration may give a weak reaction.

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*Gastro-duodenal Ulcers and Autonomic Imbalance.* (*Arch. of Neur. and Psychiat.*, May, 1927.) Wolff, H. G., and Thomas, E. W.

The authors, after a complete consideration of the anatomy, nerve-supply and physiology of the stomach, come to the following conclusions: (a) Anatomical and physiological peculiarities cause the "gastric pathway" and the first part of the duodenum to be especially favourable sites for chronic ulcerative processes once an initial mucosal erosion or hæmorrhage has occurred. (b) There is much evidence that the agents producing mucosal erosions and those perpetuating such erosions as chronic lesions are separate and distinct. (c) Electrical stimulation of the vagus led to hypertonicity, hyperperistalsis, hypersecretion and mucosal erosions. (d) A group of so-called gastric neuroses has been found to have much evidence of autonomic imbalance. (e) A group of acute gastro-duodenal ulcers has, in a high percentage of cases, shown evidence of autonomic imbalance similar to that of the gastric neuroses. (f) Another group of gastro-duodenal ulcers has shown little or no evidence of autonomic imbalance; this group gave the usual evidence of stenosis and chronicity. (g) It is possible that local (toxic, mechanical, infectious, etc.) or remote irritation (chronic appendicitis, disease of the biliary tract, congenital bands, genito-urinary diseases, etc.), by direct or indirect stimulation of the vagus, may cause a mucosal erosion. The mucosal erosion once produced, the anatomical and physiological peculiarities at the site of the lesion will determine whether or not a chronic gastro-duodenal ulcer will occur, or whether immediate spontaneous healing will take place.

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