

even when the fluid is diluted with water to five times its volume. The turbidity vanishes, however, if large amounts of acetic acid or a little hydrochloric acid are added. The only source of error seems to be the presence of mucus, as this also produces turbidity when the acid is added. But the turbidity from this cause does not clear up on addition of hydrochloric acid while it vanishes when the fluid is much diluted. If the filtrate of stomach content is very turbid to start with, the test is not applicable, but it is generally possible to obtain a limpid filtrate by slowly filtering the fluid through a moistened folded filter. The tryptophan and acetic-acid tests paralleled each other with precision in his experience, but the latter test is more reliable, he thinks, as the findings are not affected by the presence of blood, trypsin or bacteria, while the acetic-acid technic can be applied to vomitus as well as to siphoned-out stomach content. The findings were constantly negative in seven healthy persons, in twenty-four with gastric ulcer and hyperacidity and in nine with non-malignant stomach affections while they were positive in all the cancer cases except one in which the findings with the tryptophan test likewise contradicted the clinical course.

88. Inhibiting Influence of Emotions on Gastric Secretion.—One practical point brought out by Grandauer is that the gastric secretions are influenced, often to an unsuspected extent, by the mind during the process of the test meal and obtaining stomach content for examination. He found that the findings differed widely on different examinations, the fluctuations growing less and less marked as the individuals became accustomed to the procedures involved. The psychic hypersecretion or hyposecretion may nullify the conclusions to be drawn from the findings; even the psychic difference between taking the arbitrary test meal and an ordinary meal may have a marked influence.

Deutsche medizinische Wochenschrift, Berlin

January 5, XXXVII, No. 1, pp. 1-48

- 92 *Injury of the Eye. (Pathologie und Therapie der Verletzungen des Auges.) A. Elschnig.
- 93 A Post-Mortem Auscultation Phenomenon. H. E. Hering.
- 94 *Antiphlogistic Action of Lime. (Entzündungswidrige Wirkung löslicher neutraler Kalksalze.) H. Leo.
- 95 *Nutrient Intravenous and Subcutaneous Injection of Sugar. (Intravenöse und subkutane Ernährung mit Traubenzucker.) W. Kausch.
- 96 Serum Sickness. J. v. Bokay.
- 97 Salvarsan. K. Kreibich.
- 98 Herpes Zoster After Injection of Salvarsan. S. Bettmann.
- 99 Paralysis of Ocular Muscles After Salvarsan. C. Stern.
- 100 Carcinomatous Meningitis. M. Lissauer.
- 101 Importance of Corpus Luteum for Periodicity of Sexual Cycle in Mammals. L. Loeb.
- 102 Clinical Importance of Diathermia. F. Nagelschmidt.
- 103 Medical Education in the United States and Canada. C. Bäuml.
- 104 Quadracentennial of Ambroise Paré. W. Haberling.

92. Injury of the Eye.—Elschnig presents the general principles in treatment of trauma of the eye, remarking in regard to the prognosis that all nervous disturbances in the orbit resulting from pressure of extravasated blood in the region are capable of complete retrogression, while direct lesions of the nerves usually persist unchanged. Special care must be taken to prevent the drying or ulceration of the cornea when the eyeball protrudes or the lids do not close perfectly. If inflammation develops in the orbit from infection from the nose, the prognosis is almost inevitably bad. Emphysema, on the other hand, has an excellent prognosis. Treatment of all fractures deep in the orbit should be exclusively conservative. With much suppuration a compressing bandage, ice-bag and complete repose may be indicated. Only with extreme protrusion of the eyeball or very severe emphysema is it necessary to relieve by evacuation of the blood at the most swollen part of the orbital tissue. Direct operative measures are necessary if there is a fracture of the walls of the orbit with dislocation. Compound fractures should be treated by the usual surgical principles. Elschnig adds, in conclusion, that in every extensive compound fracture of the orbit, as also in every case of extensive injury of the soft parts in which contamination with soil cannot be absolutely excluded, a preventive injection of tetanus antitoxin should be given.

94. Antiphlogistic Action of Lime.—Leo expatiates on the importance of the statements of Chiari and Januschke in

regard to the power of a neutral solution of lime salts to prevent the development of pleural effusions and edema in general. (Their statements were summarized in THE JOURNAL Dec. 10, 1910, page 2102.) Subcutaneous injection of a few cubic centimeters of a 5 per cent. solution of calcium chlorid proved able to prevent the development of inflammatory edema in the conjunctiva of the rabbit's eye after instillation of mustard oil. They explained this hitherto unknown powerful action of calcium chlorid by assuming that the lime rendered the vessel walls less permeable. Leo has been repeating their experiments, his results confirming theirs in every particular. He has further demonstrated that 1 c.c. of a 2.5 per cent. solution of calcium chlorid can be injected subcutaneously into man without any local or general harm resulting. Chiari and Januschke used the intravenous route without by-effects, but Leo found the results less prompt and reliable than after subcutaneous injection. The effect was even more pronounced by the mouth than by intravenous injection, probably because the lime is eliminated too rapidly after the latter. The action is slower by the mouth than by subcutaneous injection, but 100 c.c. of a 2 per cent. solution of calcium chlorid given by the mouth cured the rabbit's conjunctivitis in six days, by the end of the week the eye appearing entirely well. He and others have repeatedly taken this dose without disturbances. His experiences further show that instillation of the same solution has a surprisingly curative action on conjunctivitis. As no unfavorable action from the instillation of 100 c.c. of a 2.5 per cent. solution of calcium chlorid in the rabbit was perceptible, he thinks that this measure can be applied in the eye clinic. A typical experiment was instillation of a drop of mustard oil in one eye; three hours later when the conjunctiva and skin around showed intense inflammation, a few drops of the calcium chlorid solution were instilled several times in the course of five minutes. Three hours later the swelling had considerably subsided, while in the control animal it was still intense. The solution was then instilled again and the next morning the lids of the control animal were firmly glued together and secreting thick pus, the conjunctiva swollen and red, and the cornea turbid. The animals treated with lime had much improved and in two days there was scarcely a trace of the inflammation, while it persisted in the control animals with great intensity and was perceptible six weeks later. Repeated series of experiments gave the same results and he regards the discovery of this local antiphlogistic action as of great importance. He thinks that it may prove useful in tonsillitis, rhinitis, gastritis or ulcer and inflammation of other mucous membranes. Other neutral soluble salts of calcium may prove effectual, particularly the lactate. Calcium chlorid may be found useful in rectal injection for enteritis, in a 1 or 2 per cent. solution; calcium carbonate has already been advocated for this purpose.

95. Nutrient Intravenous and Subcutaneous Injection of Sugar.—Kausch reports that his extensive research for some means of feeding otherwise than by the mouth has shown that grape sugar can be given in a 10 per cent. solution by intravenous injection and by subcutaneous infusion up to 5 per cent., to a daily dose of 1,000 c.c. This nourishes the patient while supplying fluids and he has found it extremely useful as a postoperative measure. He commends it as an important adjuvant in surgical affections and in cholera, uncontrollable vomiting and other troubles, draining the body of fluids.

Jahrbuch für Kinderheilkunde, Berlin

December, LXXII, No. 6, pp. 661-782

- 105 *Immunity to Scarlet Fever. F. v. Szontagh.
- 106 *Scarlet Fever. (Zur Kenntnis des Scharlachs.) A. Gigon.
- 107 Bacteriologic Study of Infants' Stools. K. Blühdorn.
- 108 *Orthostatic Albuminuria. (Zur Lehre von der lordotischen Albuminurie.) A. Lury.

105. One Attack of Scarlet Fever Does Not Confer Immunity.—Szontagh has one patient who has had scarlet fever three times in less than three years. Each time it ran a typical course without complications. Another little girl had scarlet fever twice in one year, succumbing to the complications of the second attack. The mother had suppurative tonsillitis during the child's first attack and typical scarlet