

PROGRESS OF MEDICAL SCIENCE.

THERAPEUTICS.

UNDER THE CHARGE OF

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THIOPHEN.

An unsigned paper in the *Revue de Thérapeutique Générale et Thermale*, 1892, No. 5, p. 70, gives an excellent *résumé* of this subject. Thiophen is a hydrocarbon of the aromatic series, a colorless, limpid oil, of faint odor, and miscible with water in all proportions, having as its symbol C_4H_4S . Spiegler has used the thiosulphate of soda ($C_4H_4SNaSO_3$) and the iodide of thiophen ($C_4H_4I_2S$). The soda salt is a white powder, precipitated in the form of scales, contains 33 per cent. of sulphur, of a disagreeable odor which is usually not marked when in a 5 or 10 per cent. ointment. In prurigo complicated by eczema it can replace naphthol. The biniodide has been used as a substitute for iodoform. It crystallizes in beautiful plates, insoluble in water, but very soluble in ether, alcohol and chloroform. Its odor is characteristic, but not disagreeable; gauze impregnated in a proportion of 10 per cent. emits a slight odor, rather agreeable and aromatic. This salt, in the laboratory, will prevent the development of the *staphylococcus aureus*. In burns even to the third degree; so far as preventing odor and desiccation, it is superior to iodoform. Hock has used it in various conditions, phlegmon, contused wounds, lacerations, compound fractures, mastitis, onychia, and caries, with very satisfactory results. There seems to be no poisonous action; it does not give rise to eczema, it even seems to cure it, when existing. Applied as a powder it is a vigorous disinfectant, and may even give rise to a burning sensation which may persist for half an hour. It will deodorize more energetically than iodoform, but it is a less active stimulant of granulation-tissue.

SALIPYRINE.

DR. CH. ELOY gives a short review of this remedy, which was obtained by Spica, of Padua, by the mixture of 73 parts of salicylic acid with 100 parts of

antipyrine. It occurs in crystals, transparent, of sweetish taste, and decomposed by heat. Slightly soluble in cold water, it is very soluble in warm, and especially in alcohol. It possesses antipyretic and analgesic effects, and, like acetipyrine, may give rise to exanthemata. In acute rheumatism it diminishes the pyrexia and pain, but is used in large doses, ninety grains or more daily, either in wafers or dissolved in glycerin or syrup of raspberry, and distilled water. After two days' treatment by large doses, a daily dosage of from fifteen to thirty grains is sufficient. In chronic articular rheumatism one commences with a daily dose of sixty grains, which is increased by fifteen grains, should the former prove insufficient. As the symptoms improve, the amount can be gradually diminished to seven grains, which must be continued for several weeks. In neuralgia and rheumatic hemicrania a daily amount of thirty grains, taken in two doses at an interval of three or four hours is beneficial; and as the pain becomes lessened, the remedy must be diminished and continued in the same manner as in the case of chronic articular rheumatism. It seems to be a very valuable remedy in rheumatism, and particularly in the very painful forms.—*Revue Générale de Chirurgie et de Thérapeutique*, 1892, No. 8, p. 123.

THE TREATMENT OF CHRONIC GASTRIC AFFECTIONS BY WASHING OUT THE STOMACH.

MR. D. HARVEY ATTFIELD classifies his cases as follows: (a) Muscular power in the stomach insufficient; (b) spasm of the pylorus; (c) abnormal dilatation of the stomach; (d) some cases of cancerous disease; (e) rare cases of sacculation; (f) obscure cases of obstinate vomiting. He summarizes his results as eminently satisfactory in that—(1) Vomiting is entirely checked; (2) the accompanying debility and nausea are avoided; (3) there is a marked decrease in pain; (4) there is an increase of appetite; (5) spontaneous action of the bowels frequently follows; (6) we can completely empty the stomach; (7) we can favor the recovery from dilatation. His cases show that there is a great therapeutic advantage by washing out the stomach with a siphon-tube.—*The Practitioner*, 1892, No. 284, p. 108.

DR. W. SOLTAU FENWICK presents the other side of the picture. Among the dangers he cites: (1) Convulsions and tetany. Probably, because in a case predisposed to convulsive seizures by the chronic absorption of certain morbid products from the dilated stomach, the irritation of a gastric tube may constitute an efficient exciting cause. (2) Syncope and sudden death. Any sudden alteration in the gastric pressure can, in certain cases, bring about a reflex condition of shock. (3) Perforation. The using of a gastric catheter for the purpose of investigating the chemical contents of the stomach in cases of acute gastric ulcer, is a useless and mischievous procedure. (4) Hæmorrhage. Danger may arise from a too rapid evacuation of the contents of a dilated stomach. (5) Injury to the œsophagus or to the walls of the stomach. (6) Poisoning. From the use of antiseptics through the tube. Cases are cited illustrating each division. He concludes that the stomach is washed out for all sorts of symptoms, some of which are manifestly not to be benefited by this procedure. And in cases in which it fails to do good it is likely to be productive of harm in removing products of digestion whose manu-

facture has caused the stomach a considerable amount of labor. The indiscriminate use of this method in every case of disordered digestion will prove to be a curse rather than a benefit, and will eventually throw discredit upon the whole method of treatment.—*The Practitioner*, 1892, No. 286, p. 241.

ON THE PRESENCE OF A DIGESTIVE FERMENT IN THE *ANAGALLIS ARVENSIS*.

PROFESSORS G. DACCOMO and P. L. TOMMASOLI found that this plant, made into a paste, would digest raw meat within four to thirty-six hours, at a little above the temperature of the body. To isolate the ferment they comminuted the plant in double its weight of distilled water, squeezed out the residue and washed it, obtaining the active principle in an aqueous solution, which was evaporated and treated with ten volumes of absolute alcohol. This was repeated three times, until a white precipitate was obtained. This product dried at an ordinary temperature with sulphuric ether, gave a white, amorphous, friable mass, having its peculiar odor. On calcination 11.22 per cent. of ash was obtained. The powder possesses a digestive property equally with the crude plant. It does not have any action upon starch, and apparently loses, after some time, its efficacy in digesting proteids. It is hoped that, with better methods of preparation, it may be made so that it will retain its properties.—*Rassegna de Scienze Mediche*, 1892, No. 4, p. 141.

[The classical work of Wurtz on the *Carica papaya* has stimulated others to search for vegetable digestive ferments. The *Anagallis arvensis*, scarlet pimpernel, is not an unknown remedy, although this is the first time it has been supposed to have any valuable properties. Orfila found that in three drachms of the extract was contained sufficient poison to kill a dog, with marks of inflammation of the bowels. It has been used for consumption, dropsy, epilepsy, mania, and, like most other remedies, as a preventive of hydrophobia. Heintzelman obtained a volatile oil from the dried herb, four drops of which caused intense headache and nausea, lasting for twenty-four hours, with pains throughout the body. Evidently, it is by no means an innocent plant.—R. W. W.]

THE TREATMENT OF ENTERIC FEVER.

DR. M. A. BOYD has modified his views upon this subject in the way of bringing his treatment more into harmony with the results of bacteriological investigation. Looking at the disease as primarily a catarrhal inflammation of the intestines, and, secondarily, as one of septic poisoning, his treatment resolves itself into suitable diet, and antiseptics. The diet should be bland and unirritating, such as will be absorbed mainly by the stomach and duodenum, and leave little to be dealt with by the lower part of the small intestine. He does not believe that he can abort a case of typhoid when once the characteristic fever has begun, but he can prevent, in the majority of cases, the septicæmic phenomena, which we have chiefly to deal with after the second week of the fever has passed. In choosing an antiseptic it should be one exercising its effects, not in the stomach, but in the intestinal canal, and should disinfect not only the contents of the bowels, but the intestinal walls

as well. The choice was made of ebilorine in an alkaline solution, which mingles best with the contents of the intestine, and, knowing well how easily the intestines absorb gases and pass them into the blood, it is hoped that this gas will thus be more efficient. In more than one-fourth of his cases, when this treatment was begun early, the febrile process came to an end about the fourteenth to the sixteenth day.—*The Practitioner*, 1892, No. 284, p. 81.

TYPHOID FEVER SUCCESSFULLY TREATED WITH FEL BOVIS.

DR. ADOLPH ZEH, after an extended use of the various antipyretics and intestinal antiseptics, reports favorably upon the use of this remedy in ten cases. He empties the alimentary canal by a sufficiently large dose of calomel, if the case is seen early; stimulates at once, preferably with whiskey; uses strychnine, caffeine, ammonin, enmphor, and small doses of quinine; as a beverage, dilute nitro-muric acid in a large quantity of water, and fel bovis purificatum siccum in doses of two to four grains from three to six times daily in capsules. A liquid diet—milk, beef-tea, gruel, beef extracts or meat juices—is insisted upon.—*Merck's Bulletin*, 1892, No. 2, p. 83.

THE TREATMENT OF INFANTILE DIARRHŒA OF WARM COUNTRIES.

DR. F. ROUX divides the diarrhœas into four classes: 1. Simple catarrhal enteritis, frequently developed by cold, requires only rest, restricted diet, soothing applications to the abdomen, and graduated doses of pargoric. 2. Diarrhœa dependent upon digestive insufficiency, requires a small amount of magnesin in a half-glass of Vichy (St. Yorre) as a purgative, a milk diet, and soups devoid of fat. If the stools are offensive, a powder consisting of equal parts of the salicylates of bismuth and magnesia; naphthol being here contra-indicated because of the irritation which it produces. The return to the ordinary diet must be gradual, and before each meal he directs small doses of nux vomica, rhubarb, anise seed, and culumba, in a claret glass of Vichy or Vnls. During the meals hydrochloric acid, and afterward pepsin, diastase, and pancreatin. He counteracts diarrhœa and vomiting by opium, the constipation by rhubarb. 3. The diarrhœa that follows dysentery calls for enemata of boric acid, nitrate of silver, or tincture of iodine, and the prescribing of a strict diet. 4. In true tropical diarrhœa the small intestine is the seat of disease, and it is necessary to insist upon intestinal antiseptics, salicylate of bismuth, sulpho-carbonated water, enemata of boric acid, or, better, of horated infusion of eucalyptus, with abdominal counter-irritation, as by tincture of iodine, or gentle frictions with flannel moistened with turpentine. The only method of satisfactory cure consists in an absolute milk diet, to which is added lime-water or Vichy salt. As soon as the stools are formed, beef-tea, peptones, slightly cooked white of egg and raw beef, eggs and milk, and, last of all, rice in milk can be tried. At all times remedies which assist digestion must be employed, while wine and every form of alcohol is absolutely prohibited. When the disease is cured, it is necessary for a long time to watch over the diet, and use remedies that build up the general condition.—*Revue Générale de Clinique et de Thérapeutique*, 1892, No. 9, p. 137.

THE PHYSIOLOGICAL ACTION OF ABDOMINAL MASSAGE.

DR. VICTOR ELTZ, having studied the contributions of Reibmayer and Nothnagel, believes that the action of massage in chronic intestinal catarrh depends upon the resorption of the infiltration of the wall of the intestine. In this view massage does not meet the indication of one symptom, but rather attacks the cause itself. The indications for the several methods for evacuation are: 1. For simple clearing of the bowels, *e. g.*, intestinal stenosis, internal purgatives. 2. For congenital hypoplasia of the muscular structures of the intestine, especially of the large intestine, irrigation. 3. In constipation, in general weakness, gymnastics, especially when lack of exercise is the cause. 4. Massage is indicated in—(a) true habitual constipation; (b) chronic intestinal catarrh (equally whether accompanied by diarrhoea or atony).—*Wiener klinische Wochenschrift*, 1892, No. 15, S. 221.

CREASOTE AND ITS ELEMENTS.

DR. E. MAIN has made a laboratory study of this remedy, which has of late attracted so much attention. He established the fact that the elements of creasote were poisonous in the following order: 1, para-cresylol (least); 2, phlorol; 3, guinicol; 4, creasote; 5, creasol (most). Locally, creasol was the most irritant, guinicol the least. For all these elements this laboratory work shows three important characteristics: 1, that they are feebly poisonous; 2, a tolerance can be established; 3, they are eliminated by the lungs. As remedies against tuberculosis they can be arranged in the following order: 1 and 2, phlorol and creasol; 3, para-cresylol; 4, guinicol; 5, creasote (most powerful). It is believed that although all the elements of creasote have some value, and indeed guinicol should be especially mentioned, yet creasote is the most active. Beechwood creasote should be preferred for its antiseptic power, for its feeble toxicity, and because of the results furnished by experimental therapeutics as well as by clinical observation.—*Bulletin Générale de Thérapeutique*, 1892, liv. 10e, p. 205.

THE TREATMENT OF PULMONARY TUBERCULOSIS BY INHALATIONS OF SULPHIDE OF CARBON WITH PHOSPHATE OF LIME.

DR. COROMILAS has treated ninety-nine patients suffering from pulmonary tuberculosis, recording fifty-eight successes, of which twelve relapsed, and seven were cured. Six patients died without having received any benefit, and five others succumbed from complications. He uses tonics and antipyretics while continuing the inhalations. His formula is: Sulphide of carbon, 15 parts; phosphate of lime, 10 parts; water, 100 parts. Every eight or ten days he adds 5 parts of the sulphide until he reaches 30 parts, which he does not exceed. The apparatus should contain only six ounces of water; in cold countries it should be covered with cotton to assist the evaporation of the carbon; the apparatus must be well shaken to mix the ingredients; three or four deep inhalations should be repeated every three or four hours, later every two or three hours; the medicament must be renewed every eight or ten days, because the carbon is exhausted; if hæmoptysis supervenes, treatment

must be suspended until its complete cessation. In conclusion, he believes that this remedy has an undeniable and powerful action against pulmonary tuberculosis.—*Journal de Médecine de Paris*, 1892, No. 16, p. 195.

THE TREATMENT OF BONE AND JOINT TUBERCULOSIS BY IODOFORM-OIL.

DR. ERNST BÖHNI uses a 5 per cent. solution of iodoform in oil of sweet almonds in preference to a solution in ether, or emulsions in olive oil or glycerio. He washes the iodoform with a solution of sublimate, and sterilizes his oil by heat, and obtains a solution that is permanent. He uses cold applications for a day after each injection, brine baths, massage, and passive motion, believing that immobilization is detrimental. He reports twenty-eight cases, of which seventeen were completely cured, and ten essentially improved. He insists upon nourishing diet, and out-door life.—*Correspondenzblatt f. Schweizer Aerzte*, 1892, No. 9, S. 271.

THE TREATMENT OF SIMPLE PLEURISY BY SALICYLIC PREPARATIONS

DR. H. KÜSTER discusses this very interesting question from a clinical standpoint. Having studied the work of Tetz, Engster, Drzewiecke, Deri, and Edgren, he reports thirty-two cases, divided into two classes: 1. Primary pleuritis, lungs apparently healthy. 2. Secondary pleuritis. Of the first class, he obtained favorable results in seventeen cases of the twenty-seven treated. He employed the soda salt in twenty-two grain doses, the acid in fifteen-grain doses, three or four times daily. He believes that, taking the results together, this treatment is a valuable one, in that it is not dangerous, and that it should be employed not only in simple (non-purulent), but as well in secondary pleuritis.—*Therapeutische Monatshefte*, 1892, No. 3, S. 117.

THE TREATMENT OF PNEUMONIA BY DIGITALIS.

The favorable results reported by Petresco induced DR. RUDOLF HÖFFEL to treat fifteen patients with large doses. Besides the digitalis he made use of ice-bags, cold wet-pack, occasionally leeches, and in one case, for urgent œdema, venesection; with the exception of one case, he did not use the so-called antipyretics. He does not find that these massive doses are poisonous, but that in one or two days the temperature falls and the symptoms, dyspnea and pain, disappear; that it shortens the duration of the disease two or three days; that astonishingly frequent is the termination by lysis (eight cases in fifteen). For this valuable operation of digitalis he furnishes an explanation that the dyspnea is relieved by the increased force of the heart, but that it is only indirectly an antipyretic, and not a direct one, as was stated by Petresco.—*Therapeutische Monatshefte*, 1892, No. 4, S. 177.

THE TREATMENT OF DIPHTHERIA BY SULPHORICINATED PHENOL.

DR. A. JOSIAS, from his observations at the Hôpital des Enfants Malades, where careful bacteriological examinations of the false membranes, exudations, and even of the tonsillar mucus were made, concludes that this remedy is a very valuable one. The formula is 20 parts of phenic acid with 80 parts

of sulphuricinate of soda. The method of procedure is: Having dried the surface and false membranes, or having removed the latter by gentle pressure of cotton upon a carrier, apply over each false membrane cotton moistened in this mixture. This application is repeated five or six times each twenty-four hours. Besides, the mouth is irrigated with lime-water, in the hope of softening or detaching the membranes, and the nourishment is prescribed with great care; and further, in markedly septic cases, oxygen, by inhalation, is employed. These applications are well borne, and cause nothing more than a sensation of heat. When the cure of the diphtheritic angina is assured, the throat is painted three or four times daily with a mixture of salicylic acid in thirty parts of glycerin, and the mouth is washed with a 3 per cent. solution of boric acid. Of the thirty-three children treated, but nine died, one of them having been admitted *in extremis*.—*La Médecine Moderne*, 1892, No. 17, p. 253.

THE TREATMENT OF DIABETES.

DR. CHARLES H. RALFE believes that in protracted cases of diabetes there should be no relaxation of the restricted dietary; whilst the extreme sensitiveness to the minutest particle of starch and saccharine food exhibited when the glycosuria is still controlled by absolute restriction of the diet tells equally against its resumption. The next consideration is whether the advantages gained by a strict adherence to an absolute diet of proteid substances by diminishing the amount of sugar in the blood, and so checking the tendency to further lowering of the assimilative processes in the body and controlling the extreme diuresis, may not be gained at a too great expense to the patient's well-being, and that some benefit may be derived by permitting a slight relaxation from a too rigid proteid dietary, and whether its too long continuance is not in itself a danger by causing the formation in excess of bodies such as the morbid products of proteid metabolism. In diabetes with a flesh diet there is a positive entrance of an increased amount of acid salts into the body which at an early period of the disease are eliminated by the kidneys, but when the bodily powers begin to fail they accumulate to a dangerous extent. Added to this is the fact that with increased feebleness the power of digesting proteid material is lessened, and consequently the risk of the formation of toxic bodies in the intestines is increased. Admitting the risks attendant upon a proteid diet, it is not believed that any relaxation from it can obviate them. Two measures will be found to be of benefit, namely, in diminishing the amount of proteid material as the patient's powers of digestion fail, and in prescribing general and abdominal massage. So far as the opium treatment is concerned, so long as the glycosuria can be removed by diet it is unnecessary. When used it should be administered by the mouth, about an hour after the meal; the preparation to be used should be a combination of liquor opii with acetate of morphia in solution, and the dose should be one sufficient to entirely control the glycosuria, remembering, however, that diabetics are singularly tolerant of this remedy. So long as opium effects a reduction in the amount of sugar, we may safely increase the dose. If, however, the sugar excretion gains ground in spite of diet and opium, it is not wise to increase the dose.—*Lancet*, 1892, No. 3582, p. 902, and No. 3583, p. 961.

THE USE OF DIGITALIS IN AORTIC DISEASE.

In the *British Medical Journal*, 1892, No. 1628, p. 542, DR. ALFRED G. BARRS, after a very thoughtful discussion, concludes:

1. In all cases of valvular disease the chief desideratum in regard to the heart itself is the condition of the cardiac chambers in respect to dilatation and hypertrophy.

2. That the presence of symptoms in cardiac disease always means failure of compensation.

3. That the condition described as over-hypertrophy or over-compensation does not exist.

4. That the dangers in aortic disease arise from the same cause as the dangers in mitral disease, namely, failure of the compensation—that is, failure of the ventricular muscle to overcome the ever-increasing work put upon it.

5. That if digitalis is safe and beneficial in mitral disease, it is equally so in aortic disease.

DR. SEYMOUR TAYLOR argues from clinical experience that there is little or no comparison between the action of the aortic valve and that of the mitral, and that the theories advanced in the preceding paper are not orthodox (*British Medical Journal*, 1892, No. 1631, p. 705).

ERGOTININE.

In *La Médecine Hypodermique*, 1892, No. 2, p. 17, DR. FRANCK recommends the use of this active principle of ergot in place of ergotine, which is frequently inert and often untrustworthy. It is prompt, surer, and more constant, does not give rise to local accidents, and is useful in smaller dose— $\frac{1}{100}$ to $\frac{1}{200}$ of a grain. Nor, indeed, are these injections painful. Evetsky and Denslow have used it in acne. Alternating with hypodermatic injections of iron, it is useful in the menstrual disturbances of young girls. It has been used with good results in several cases of cerebral apoplexy, epistaxis, hæmoptysis, hæmaturia, hæmatemesis, and purpura hæmorrhagica. Haning has used it in suppository in hemorrhoids, and it is valuable used hypodermatically in this same condition when injected into the margin of the anus. Dujardin-Beaumez has treated with success menorrhagias, Ducros has employed it for paralysis, and Payan for paraplegias. In lead-paralysis Hiter has obtained a cure in less than a month, giving also iodide of potassium. Payan, Allier, and Guersant, Jr., have treated paralysis of rectum and bladder, especially in old subjects, by this remedy.

QUININE RASH PRODUCED BY VERY SMALL DOSES.

DR. FRANCIS J. SHEPHERD reports a very unusual case in the *Montreal Medical Journal*, 1892, No. 9, p. 667. A robust man, aged forty-one years, who had frequently suffered from eczema and rhus poisoning, after taking three grains of quinine suffered from marked erythema of groins, inner sides of thighs, and lower part of abdomen. The skin was swollen and tender; purpuric spots were found in the red patches. On the next day the eruption had spread to the feet, and the hands were beginning to be affected. On the

wrists was a well-marked vesicular eruption. At the end of ten days desquamation began, flakes of skin coming from the thighs, but the skin from the palms of the hands and soles of the feet came away in one piece. There was at no time any elevation of temperature or other constitutional disturbance. One month later he passed through a similar attack after five grains of this remedy.

THE DYE-TREATMENT OF INOPERABLE MALIGNANT NEOPLASMS.

PROF. R. VON MOSETIG-MOORHOF (*Wiener Klinik*, 1892, Heft 1) devotes a paper to this subject. Commencing with his first observations in 1883, using the trichlorate of aniline, he took up methyl-violet in 1890 (powder form; in ointment, ten, twenty, or a larger percentage, in diachylon or lanolin base; in solution one to five hundred, of which, one-half to three drachms, used by parenchymatous injection, every two or three days). The favorable results obtained are: 1, relief from pain; 2, improvement in general condition; 3, improvement in the mental condition; 4, improvement in the functions of the affected part; 5, lessening of the tumor. Untoward results are: 1, œdematous swellings; 2, development of foci of softening; 3, general conditions, as chilliness, fever. Ten cases are reported in considerable detail, the general conclusions being that the results have been favorable and that this method should be employed in the class of cases where radical treatment is impossible. In 1891 experiments were undertaken with carmine dissolved in water by the addition of an alkali (ammonia); the latter caused pain on injection, and was therefore abandoned. The formula recommended is 2 per cent. of carmine dissolved in 3 per cent. watery solution of soda. This solution seems to be absolutely harmless, and the pain caused by the injection is insignificant. On account of the more rapid diffusion of the coloring matter into the tissues the effect is more speedily obtained. It is likely that this remedy may, with benefit, replace the aniline colors. Three plates add much to the value of the paper.

MEDICINE.

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ENLARGEMENT OF THE SPLEEN IN YOUNG CHILDREN.

DR. WALTER CARR hases his paper on the observation of thirty cases in the Victoria Hospital for Children. The term "splenic anemia" of Greis-