

that it is a generally conceded fact that remedies which have any action upon the alimentary canal, usually diminish the supply of blood to other parts. This I have found to be particularly true in regard to cutaneous hyperæmia. It is my usual custom, therefore, when this condition exists, as is usually the case in eczema, to act upon the alimentary canal, giving usually a saline laxative. For the purpose of demonstration I have frequently in dispensary practice cured cases of eczema by this method alone, restricting of course, at the same time, the patient from scratching the parts. I may add, therefore, that from both theoretical and practical reasons I do not regard the drug as having any special merits as an internal remedy; nor perhaps the laxative above referred to over many other laxative or purgative remedies having an irritant effect upon the alimentary canal.

COCAINE.

Brief mention of the comparatively new and much talked of drug, cocaine, may perhaps be tolerated. As common sense should teach any intelligent person, this drug, if useful as a local anæsthetic in one location, must necessarily be so in any other where it can be properly applied and sufficiently absorbed. It, however, is not well absorbed by the skin, and therefore not as useful as in certain other localities. To control the itching in eczema, if there be sufficient abrasion to favor its absorption, it will be found useful in a strong solution; also in pruritus ani. I have not found it to be of much service in relieving the pain due to the removal from the face of superfluous hairs by electrolysis.

LITERATURE.

Of the new publications that have appeared during the past year, may be mentioned the "Photographic Illustrations of Skin Diseases—Syphilitic and Non-Syphilitic," by Geo. H. Fox; also, by the same author, "The Use of Electricity in the Removal of Superfluous Hair and in the Treatment of Various Facial Blemishes;" "A Manual of Dermatology," by A. R. Robinson, of New York; "Acne and Its Treatment," by Bulkley; "Practical Notes on the Treatment of Skin Diseases," of which the first two numbers, on "Diseases of the Perspiratory and Sebaceous Glands," and "Eczema," respectively, have appeared, by Geo. H. Rohé, of Baltimore; also a valuable Handbook of Diseases of the Skin," by Ziemssen.

ORIGINAL ARTICLES.

INTRA-VENOUS INJECTION OF SALINE SOLUTION IN COLLAPSE FOLLOWING HÆMORRHAGE.¹

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In order that our profession may know of the benefit to be derived from the intra-venous injection of

¹ Read in the Section on Surgery, at the Thirty-Seventh Annual Meeting of the American Medical Association.

salt solution and its preference to either the transfusion of blood or the intra-venous injection of milk in the collapse of hæmorrhage, the following case is related;

On November 30, 1885, the writer, assisted by Drs. Bassett and Irwin, of Quincy, and King, of Payson, Ill., removed from the mouth of Mr. Thomas Seals, age 50 years, what was diagnosed as a malignant epulis, springing from the left lower maxillary bone and filling the oral cavity. After the operation the growth was examined microscopically by Dr. Gilmer, of Quincy, who pronounced it a round-celled sarcoma. The shock of the operation was very slight.

Within two weeks the growth was seen to be recurring, but as Mr. S. was rapidly regaining strength it was thought safer to delay for a few days the second operation. December 19, 1885, just twenty-one days from date of operation, I was summoned to the house of Mr. S. In company with my brother, Mr. J. H. Rook, I answered the call, and found bright arterial blood streaming from the mouth of my patient. Rupture of the facial or lingual artery was suspected, but examination revealed no ruptured vessel, only a rapid oozing from the sarcomatous tissue. A cloth saturated with Monsel's solution of iron was thoroughly applied to the bleeding surface, which arrested the hæmorrhage. At the moment the hæmorrhage was checked Mr. S. fainted. He was laid upon the floor and assistance was sent for. Looking at my patient, who was in the unconscious and pulseless condition of extreme collapse, I determined to attempt his resuscitation by the intra-venous injection of a dilute saline solution. Asking for a bowl of warm water and some table salt, I proceeded to ligate the left arm. After waiting a few moments, the veins not distending sufficiently to show their location, the right arm was ligated, patient turned to his right side, where in a few moments the median basilic vein was seen. At this moment Dr. Lee, of Quincy, came in, and readily seconded my efforts. The skin was incised, a grooved director passed under the vein, into which was introduced a small trochar and about which was passed a catgut ligature to prevent regurgitation. I then took from my case a Mattson's rubber syringe, removed the nozzle with metal piece attached, filled the syringe with the warm water made slightly saline to taste, slipped the end of the rubber tube on the canula, and slowly injected the warm saline solution until a good radial pulse was produced and the patient returned to consciousness. The canula was then removed, the vein occluded by tightening the ligature, and the patient lifted from the floor to his bed, where in a few moments he was attacked with a severe chill. He was quickly surrounded with bottles of hot water, and in twenty minutes was resting comfortably. He experienced great thirst for some hours, during which he drank freely of cold water and milk, which were occasionally rejected by the stomach. No alcoholics were administered.

Notwithstanding the great loss of blood, our patient was able to undergo, four days later, his second operation, which was performed by Dr. Byrd, assisted by Drs. Lee, Irwin and myself. Since the date of

the second, seven subsequent operations have been performed, the last being on April 27, 1886. Mr. S., though much enfeebled by the continued recurrence of the disease, is yet able to take much outdoor exercise. The quantity of blood lost at the time of the hemorrhage was found by measurement to be one hundred and ninety ounces, while the quantity of salt solution injected was only eighty ounces.

Having seen and treated only the case narrated, does not perhaps entitle me to the privilege of formulating rules for the guidance of others, yet a little argument in favor of the method may not be without interest. It is a known fact that the blood corpuscles multiply very rapidly, and all that is needed in a case requiring transfusion is the injection of a suitable fluid in which the corpuscles can multiply. Such a fluid is the dilute saline solution, which will also prevent the remaining blood from coagulating. The dangers and difficulties attending the execution of other methods, for which the salt solution may be substituted, are apparent to all. In the process of immediate transfusion advised by Aveling we are met by the difficulty of finding a willing and suitable donor, the necessity of having a special transfusion instrument, and the danger of carrying coagulated fibrine into the circulation of the recipient. If the method of injecting defibrinated blood be employed, a suitable donor must be found, after which valuable time is consumed in extracting the blood and removing its fibrine. When employing milk for intravenous injection we are rightly advised to use only the warm freshly-drawn milk, a condition of that fluid not easily obtained in our cities.

In conclusion, I ask a trial of the salt solution, for I am convinced that it is as efficient, more practical, and safer than the transfusion of blood or injection of milk.

VENOUS BLOOD TUMORS OF THE CRANIUM

in Communication with the Intra-Cranial Venous Circulation, Especially the Sinuses of the Dura Mater.

BY WM. M. MASTIN, M.D.,

OF MOBILE, ALA.

(Concluded from page 344.)

PATHOLOGICAL ANATOMY.

Fortunately the collected cases represent a goodly number of authentic post-mortem sections, together with valuable surgical examinations; and consequently, these furnish pathological data of a character sufficiently definite to enable, it is believed, the formulation of rational and decisive conclusions—conclusions which are also added to and strengthened by marked symptoms and conditions, as manifested by numerous clearly analyzed cases without post-mortem demonstration.

A rapid rehearsal of the anatomical facts collectively, before entering into the examination and consideration of individual pathological points, seems advisable.

Moreau's Case.—There was a venous varix formed

of congeries of veins, terminating in enlarged and dilated vessels which passed, by means of three perforations in the frontal bone, into the longitudinal sinus. For a large extent around these osseous openings the dura mater was inflamed and covered with pus,—a phlebitis and meningitis the result of the previous operative treatment. This is an example of venous varicose tumor.

Michaud's Case.—Two erectile growths, one over brow and eye-lid, the other located on the head. They were composed of a cavernous tissue, under the seat of which the bone was perforated by a multitude of little apertures giving passage to the veins coming from these structures in their course to the superior longitudinal sinus.

Foucteau's Case.—Occupying the site of the posterior fontanelle was a blood tumor which communicated directly with the superior longitudinal sinus through a single opening in the fontanelle the size of the little finger, by means of a tubular pedicle of which the cyst appeared to be an expansion. The tumor was composed of two principal cysts with a small accessory pouch, which were lined by a vascular serous membrane. This serous membrane was of the same character as, and continuous with, that of the cerebral sinus through the above-mentioned pedicle. Thus it would appear that this was a blood-cyst formed by a hernia of the sinus through the unclosed posterior fontanelle, in which only the serous coat of the sinus was recognizable by the eye alone.

Demme's Case.—Located on the top of the head (in the middle of the sagittal suture) was a tumor composed of a pouch the interior walls of which were covered by fibrinous laminations, of different color and consistence, according to their respective ages, as in a true aneurismal sac. In the coagulum in contact with the bottom of this pouch was a funnel-shaped depression which proved to be the entrance to an opening leading to the cranium. The superior longitudinal sinus was distended and filled with a coagulum, and was considerably dilated at a point corresponding to the external tumor with which free communication was demonstrable. The external wall of the cyst consisted of the normal scalp, but the other layers were composed, very evidently, of the sinus walls protruding through the osseous opening. Traction upon the tumor showed that the opening in its base consisted of a tubular pedicle connecting its cavity with the sinus. The pericranium did not enter into the formation of the cyst coverings, but was intimately attached to the circumference of the skull opening and the pedicle, showing that it had either ruptured or been absorbed. The cranial tissue was thinned throughout the space occupied by the tumor, rather transparent, and in a state of rarefaction. The walls of the sinus were thickened, especially the fibrous elements, but otherwise little altered. The microscope was employed in the examination. This presents a case of true ectasia of the superior longitudinal sinus through the anterior fontanelle, probably the anterior angle.

Acland's Case.—The growth was a venous capsule communicating through a foramen in the protuberantia occipitalis, by means of a fibrous tube, with the