On the Pathology of Asphyxia, and its Removal by Transfusing the Arterial Blood of Animals.

By ROBERT BRANDON, Esq., London.

ASPHYXIA is the cessation of the specific vitality of the brain through the partial or total cessation of the heart's action, and death, from whatever cause produced, is only asphyxia. In asphyxia, there is a want of arterial blood, and the most obvious cure is, the supply of this by means well known to surgeons of former times. Arterial blood was procured from animals, and a communication being established between the artery of the animal and that of the patient, a sufficient quantity was allowed to flow through an elastic tube, until the heart's action was restored. It has been objected, that there is a difference in the size of the blood globules of animals, as compared with those of the human subject; but surely this can be of no consequence, since the arteries and veins are large enough to allow of the passage of globules twice the size of those contained in the blood of animals. I propose the use of this operation in all cases of approaching death; but we should not hesitate to operate, even when the heart's action has ceased. The brain dies before the heart, and there is no doubt that life may be recalled, if there be but the minimum amount of pulsation in the heart. But we may even go beyond this, and assert, without fear of contradiction, that the heart's action may be, and has often been, restored, after it had entirely ceased. Again, the heart's action has sometimes only apparently ceased, only that the pulsations are not visible through the thorax. If you poison a rat, and open the chest after all action of the vital functions has ceased, you may witness the truth of what is here insisted on. Pure oxygen gas has been used with success, to restore the heart's action after it has quite ceased; and so has galvanism, passed through the base of the brain and upper part of the spinal marrow; and so has brandy; and in the case of infants born asphyxiated, artificial respiration and the hot bath are often used to recal the play of the vital functions. In asphyxia, the hot bath should be used at a high temperature, in order to produce the greatest effect in the least time, since the arterialization of the blood, by means of the skin, cannot take place to the full extent when the patient is in the bath.

On Suffocation by Drowning, and from Paralysis of the Muscles of the Larynx.

By S. GOWER, Esq., Surgeon, Hampstead.

IN the instructions of the Humane Society, for the recovery of persons apparently drowned, the popular remedy of holding the drowned person up by the heels is justly condemned. It was no doubt popularly expected, that some pailfuls of water would run out at the mouth and nose in this posture. But it is desirable that, amongst other means used, the mouth should be placed, not retained, in a depending position, to allow of any fluid escaping, by the force of gravitation, from the larynx. A case in point once occurred to me, which made an indelible impression on my mind. It was that of a child, not drowned, but with the muscles which assist in deglutition partially paralyzed. Some castor oil had been given, and, I think, a small dose of calomel, but it was doubtful whether they had passed the pharynx, and whether the epiglottis had proved treacherous. There was difficult respiration, and a gurgling sound in breathing. I had the child placed on its side, or rather on its stomach, when some of the oil and a quantity of mucus flowed from the mouth and throat, and the respiration was immediately and entirely relieved. The child died, but died less distressed and more easily than it would otherwise have done, presenting also a much less painful spectacle of apparent suffering. An attention to this circumstance, in cases of apparent drowning, seems to be one of those things, the neglect of which would be an oversight.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

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ON THE UTILITY OF TRISNITRATE OF BISMUTH IN THE DIARRHŒA ACCOMPANYING PHTHISIS. By THEOPHILUS THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption and Diseases of the Chest.

THE author considers the trisnitrate of bismuth to surpass in efficacy and safety our most approved remedies for this complaint. He has taken every opportunity, during the last

twelve months, of testing its powers, and has preserved notes of twenty-one of the cases in which it was administered. Of these, eighteen were phthisis in various stages of progress, and three, bronchitis. In fifteen of the patients the diarrhœa was entirely removed; in four, transient benefit was experienced, and the remedy proved useless only in two instances. The dose administered was about five grains three or four times daily, usually combined with a little magnesia and gum arabic. Dr. Thompson has referred to various authors who have written respecting the properties of bismuth, without being able to collect from them any evidence of its powers in the phthisical variety of diarrhœa, but he entertains a strong conviction of its peculiar appropriateness to this affection, and has obtained important confirmation of his experience in a recent communication from Dr. Lombard, of Geneva.

A PLAN OF TREATING OVARIAN DROPSY BY THE ULCERATIVE OPENING OF THE CYST AFTER ITS PERMANENT ADHESION TO THE WALLS OF THE ABDOMEN. By EDWARD JOHN TILT, M.D.

THE author was led to attempt this mode of cure by observing the process of Nature in some spontaneous and radical cures of ovarian dropsy. His first object is, to establish solid adhesion between the peritonæal covering of the cyst and the peritonæal lining of the abdominal parietes. His second object is, to make the smallest possible opening into the cyst, so that it may not be suddenly emptied, but remain always full, and be only relieved *per stilicidium* of the overplus of liquid distending its cavity, while it gradually contracts. To attain both these objects he adopts the plan which has often been successful in effecting the adhesion of hydatid cysts of the liver to the abdominal walls. It consists in the application of Vienna paste to the appropriate part of the abdomen. He relates one case in which a radical cure of an ovarian cyst was effected by this means.

A lady, who had always enjoyed good health, ceased menstruating at forty years of age. Soon afterwards, having been exposed to cold, she was seized with violent pain in the left iliac fossa, followed by shivering and high fever. When these symptoms were relieved, a tumour of the size of an orange was felt in the situation of the left ovary. This tumour gradually increased, and in a short space of time the patient had the appearance of being advanced nine months in pregnancy. Vienna paste was applied to the pit of the stomach; an eschar was produced, and fell off, and afterwards a small opening was formed by ulceration, through which an albuminous,ropy fluid escaped. The abdomen was supported by moderate pressure. In a few weeks the discharge became purulent and offensive. Tepid water was then injected into the cyst daily for some months; the cyst gradually contracting, so that at length it would receive only an ounce of water. In about a year the patient was in effect well, although for several years a fistulous opening remained at the pit of the stomach. In the course of the case the cyst formed a communication with one of the intestines, and for several days the patient passed purulent stools, while, during that time, no pus escaped from the external wound.

CASE OF HYDATID DISEASE OF THE LIVER CURED BY OPERATION.

By GEORGE OWEN REES, M.D., F.R.S., Assistant-physician to Guy's Hospital, and Principal Medical Officer to the Penitentiary Prison.

THE case is detailed at some length. The patient was a man aged thirty-one years; admitted into Guy's Hospital on the 13th of October, 1847. Examination of his abdomen detected a distinct tumour occupying the right hypochondriac and epigastric regions. Fluctuation could be felt in it. On the 4th of December the tumour was tapped by Mr. Hilton, with a trocar and canula not larger than an ordinary exploring needle, straps of plaster having previously been passed round the body, so as to fix the tumour in position, and to exert pressure upwards. Thirty-eight ounces of clear fluid were removed. The wound quickly closed. On the 7th of January, the tapping was repeated with the same instrument, and with the same precautions, as before. On this occasion pus of a very offensive odour escaped, and only ten ounces were obtained, owing to the canula becoming obstructed. On the 9th of January the tumour was tapped a third time with a full-sized trocar and canula, an elastic gum-tube being passed through the canula. Twenty-four ounces of fœtid pus escaped, with membranous flakes, and partially-destroyed hydatids. The opening was maintained, and fœtid pus, with, occasionally, hydatids, continued to be discharged (the capacity of the sac at the same time diminishing) till the commencement of April. On the 11th of April the discharging orifice had closed, and