

normal ileum. This portion of intestine, making a few convolutions, passed obliquely upwards and to the left, across the spinal column as high as the left kidney, thence descending rather abruptly, recrossed the spinal column, descending without convolutions into the right iliac fossa, thence passing transversely across the pelvis, terminating, not in a fixed cul-de-sac as originally supposed, but in the bladder, by a minute orifice at its posterior part, and immediately above the vesical sphincter. This opening in the bladder was covered by a longitudinal fold of mucous membrane; in the rectum it was unprotected.

With the exception of the rectal connection, the bladder was normal, its lining showing not so much as a feculent stain. The artificial anus had been made transversely across the rectum, about an inch from its termination.

DOMESTIC SUMMARY.

Subcutaneous Injection of Strychnia in Amaurosis and Amblyopia.—Dr. HASKET DERRY extols (*Boston Med. and Surg. Journal*, Nov. 5) the efficacy of subcutaneous injection of strychnia in certain cases of amaurosis and amblyopia. He has found it particularly useful in cases of "amblyopia ex abusu." "It has for some time," he says, "been known that the long-continued, excessive use of alcohol or tobacco sometimes gives rise to a peculiar affection of vision. Its acuteness slowly and regularly diminishes. There is no contraction of the visual field, no break in its continuity, but distant and near objects grow gradually indistinct, the patient often using the expression that everything about him is enveloped in a gradually thickening mist. Glasses are found of no avail for distant objects, though convex lenses for a time sustain the failing powers of the eye for the near. But reading and writing finally become impossible. Ultimately, if the disease progresses, the patient is unable to guide himself about, and blindness may ensue. During all this time, there is no change in the external appearance of the eye. The ophthalmoscope alone reveals a change; at first, a degree of congestion of the optic nerve; towards the end, an atrophic degeneration of the same.

This is the true "amblyopia potatorum," or, more properly, alcohol not being its only cause, "amblyopia ex abusu." I have had the curiosity to look through my own records, in order to ascertain the comparative frequency of its occurrence. It occurred 52 times among 6602 patients, about .8 per cent. In hospital practice, I am satisfied it occurs more frequently. Of my 52 cases, 16 proceeded from the abuse of tobacco alone, 5 from that of alcohol, 31 from both combined.

Those who have treated these cases previous to the introduction of strychnia injections will all agree as to the slowness with which improvement takes place. It is true that rigid abstinence from the use of the exciting cause, and the employment of tonics will generally arrest the progress of the affection. But gain is excessively slow, frequently, for months, almost imperceptible.

Condition of the Uterus Five Weeks after Delivery.—Dr. WM. F. JENKS, one of the Surgeons to the State Hospital for Women, has lately had the opportunity of examining the uterus five weeks after delivery and he has given (*American Supplement to the Obstetrical Journal*, Nov. 1874) an account of his investigations.

He states: "I have been led to coincide with the opinion now held by some of the best histologists, that the reproduction is effected through the medium of the connective tissue cell in a way with which we are familiar from the study of the process of repair in other organs, viz., by their proliferation and division, forming thereby indifferent or embryonic cells, which subsequently develop into

the unstriped muscular fibre. I have been led to this conclusion from the fact that I can find no evidence of the division of the nucleus of the fatty degenerated muscular cell, while it is contrary to the laws of reproduction to suppose that a cell, itself undergoing death by molecular fatty degeneration, should manifest the highest attribute of life, viz., the production of a new cell endowed with all the marvellous attributes of vitality. In studying the process of fatty degeneration in other organs, we find that the nucleus, although retaining its function and form longer than the protoplasm, does itself in turn succumb, and finally is converted into fatty molecules, which may subsequently be absorbed. The parenchyma of the uterus submitted to me for examination was, however, infiltrated with small round young cells, such as we meet with in the repair of every tissue after injury, to which the name of embryonic or indifferent cells has been given, because they are impressed with the type of the tissue in which they are generated, and are capable, like the cells which we find in the germinal mass or vitelline sphere in the embryo, of development into muscular nervous or osseous tissue. On examining the external muscular layers of the organ, the remains of the old hypertrophied muscular fibre were evident, the individual cells, however, were much diminished in size and filled with fatty granules; but nowhere else in the uterus was there a trace to be found of the former muscular structure; hence the inference is rendered probable that the process of rejuvenation proceeds from within outwards, and approaches completion at or near the fifth week after parturition, and this opinion coincides nearly with that of Heschel, who states that the fatty degeneration and absorption of the old muscular structure is not completed before, nor does it continue after the eighth week. Priestly, in his treatise on the 'Gravid Uterus,' writes that the colossal muscular fibres are not found after the third week, the middle coat now consisting of embryonic cells."

"My attention," he adds, "has been especially directed to this microscopic examination, from the fact that at present the dietetic management of the puerperal state is a question which is being earnestly discussed. I cannot but believe that, during the time when this active process of involution is taking place, not only in the uterus, but also in the walls of the vagina, and the ligaments which aid in supporting the womb, while the organ itself is greatly increased in weight with diminished tonicity, a rest in bed for ten days or two weeks, and subsequently a careful return to any active exercise, is plainly indicated. In this opinion I am the more convinced from the fact that in a dispensary practice, where the patients are drawn from the poorer class in society, unable or unwilling to submit to restraint after confinement, by far the commonest form of uterine disease is subinvolution of the uterus after delivery or abortion, with its attending ills of displacements, and chronic catarrhal conditions of the mucous membrane.

"These are essentially chronic conditions, slowly developed, depending for their existence on structural changes in the tissues, or rather on the *arrest* of certain changes which, physiologically, should take place, which are not, however, normally completed until the expiration of a month or more after delivery. Therefore, in estimating the value of any mode of treatment of the puerperal woman, her condition, six months or a year after her confinement, must be the criterion, and not her general health a month after delivery. Even if this condition of subinvolution exists, the physical signs and symptoms are manifested only when the enlarged and indolent organ, engorged in consequence of a sluggish circulation—which is in part due to the implication of the muscular tissues of the bloodvessels in this arrested repair—sinks deeper into the cavity of the pelvis. The uterus usually becomes retroverted as it descends, inasmuch as it does not receive the proper support from the relaxed ligaments, vaginal walls, and perineal body, while the mucous membrane, owing to the passive congestion of the bloodvessel system, passes into a state of chronic catarrh, and the accompanying disturbances, both local and sympathetic, from this enlargement, structural change, and displacement of the organ, slowly but surely develop themselves at a later period."

Combined Administration of Chloral, Morphia, and Atropia.—Dr. ROBERTS BARTHOLOW, of Cincinnati, read (October 19) before the New York Society of Neurology and Electrology a paper on this subject. The following is a condensed summary of the results obtained from the simultaneous administration of these three articles.

Chloral differs from morphia, when injected subcutaneously, in the more decided systemic effects and the less local impression on the sentient nerves. As regards the systemic effects, the action of chloral is very much the same when administered hypodermically as by the stomach. The chief danger is an arrest of the respiratory movements. Chloral does not exert any chemical action on atropia when the two are held in solution together, for dilatation of the pupil of a cat takes place when the combined solution is instilled into the eye. Dilatation of the pupil also happens when they are administered hypodermically together. An apparent antagonism is observed as regards their action on the heart when the solutions of chloral and atropia are placed in contact with the heart of a frog when in position in the chest, after division of the medulla, or when the heart is removed. The action of the heart is further found to continue much longer when a lethal dose of chloral is administered together with atropia. In rabbits the same result is produced by the conjoined administration of the two agents.

Atropia is found to prolong the chloral narcosis several hours in rabbits, and diminishes the sensibility to pain. In man the excitant action of atropia hinders the occurrence of the chloral narcosis, but rather deepens the sopor when it at last supervenes. The effects of atropia last much longer, and are, apparently, in no way prevented by chloral.

Morphia deepens in every way the effects of chloral. Dr. Bartholow found, in the course of some experiments on himself, that many of the unpleasant effects of morphia are modified, as regards the wakefulness caused by the latter, but are not modified as regards the subsequent uneasiness, vomiting, vertigo, and constipation. When the two agents are administered conjointly, a much less quantity of chloral is necessary in order to produce sleep.

These agents act much more happily when administered simultaneously. Chloral causes sleep, morphia relieves pain, and atropia prevents or lessens the depression in the respiratory and cardiac movements caused by the other two, whilst it contributes to their cerebral effects.

These physiological studies are confirmed by the therapeutical results. The combination of chloral, morphia, and atropia is adapted to those cases of *insomniæ* caused by pain, or in which chloral and morphia alone merely increase the cerebral excitement, as in hypochondria, puerperal mania, etc. This combination is also indicated in cases of fatty and irritable heart.

When pain is to be relieved, chloral is not so serviceable alone as in combination with morphia and atropia. The local administration—that is, the insertion of the medicament at the site of pain—is more effective than the merely systemic impression. This is especially the case in *tic-douloureux*, sciatica, and coxalgia, which are much more effectively treated by injections practised into the neighbourhood of nerves which are the seat of pain. The combination of a local irritant and benumber with a systemic anodyne is more curative than either used singly.

In cases of *muscular spasm* the author of the paper had obtained excellent results from the combined use of chloral, morphia, and atropia, and he especially called attention to the efficacy of these agents in the cramps of cholera. Many cases of spasmodic asthma and hay-fever had been benefited by their conjoint administration.—*Med. Record*, Dec. 1, 1874.

Erysipelas treated with Sulphate of Quinia.—Dr. Y. R. LE MOXNIER recommends (*New Orleans Med. and Surg. Journ.*, Nov. 1874) the sulphate of quinia, given in doses of two grains every hour, for the cure of erysipelas. He says he employed it, with advantage, in his wards at Charity Hospital, New Orleans, at a time when for five months the disease reigned epidemically, so that on many occasions he dared not use the knife. He has also used it as a *prophylactic*, and he quotes one case of fistule of the left nates, in which he