

functional and temporary causes, instead of to organic and permanent mischief, there is no need, as in the last-mentioned cases, for such an extremely abstemious diet when the violence of the attack has passed off and the assimilating and excretory organs are beginning to resume their work. The simpler the diet, and the more moderate its quantity, consistently with the requirements of the system, the more likely will the patient be to escape an attack; but provided the food be wholesome and digestible, it may be taken in fair quantity without risk of occasioning a recurrence of gout.

A word of caution may be added respecting exercise. Nothing can be more beneficial to gouty subjects than regular and active exercise. It promotes digestion, stimulates the action of the skin, increases the activity of the other excretory organs, and, by its influence over the function of respiration, it serves to prevent the accumulation of uric acid in the blood. But although this holds good in respect to exercise which is consistent with the patient's strength, it is otherwise in respect to exercise which is excessive in degree, and leads to bodily and mental exhaustion. In the one case it promotes healthy assimilation and healthy excretion; in the other it is productive of nervous exhaustion, and so of impaired digestion, and perverted if not defective excretion. In the former case its action is antagonistic to gout; in the latter it is directly provocative of it. This is the more necessary for you to remember because patients ordinarily entertain erroneous ideas on the subject. I am constantly consulted by gentlemen who, after having been hard at work all day, make a point of taking a brisk "constitutional" walk before dinner. They come home to their meal thoroughly fagged and exhausted, and yet are surprised that their digestion proves imperfect. They boast that they are careful in respect to diet, and complain that they are troubled with flatulence, heartburn, and gout. How can it be otherwise? A gouty man needs all the nervous power he can command to enable his various organs to do their work efficiently, and if he sits down to dinner in a state of exhaustion his functions cannot but be imperfectly performed. Bear this in mind, and act accordingly. The healthy, vigorous man cannot easily take too much or too active exercise; the weakly man, and the man whose kidneys are unsound, cannot be too cautious not to overtax his strength, and so to impair his power of digestion. If by force of circumstances he is compelled to sit down to dinner unduly exhausted, he should commence with a glass of sherry or some slight stimulant, and should be more than ordinarily abstemious. In this way his digestive organs may get through their work, and he may escape the ill effects which would otherwise result.

Let me add a few words of advice respecting the administration of colchicum. By some persons this remedy has been vaunted as a specific for gout, and by others is regarded as little less than a poison, which, even when carefully administered, depresses the patient, and renders him liable to frequent relapses. Both these opinions are erroneous, and are founded on a limited and imperfect observation of disease. In the earlier attacks of gout in otherwise healthy subjects, the administration of colchicum cannot safely be neglected. It is perfectly true that when exhibited by itself, colchicum will rarely prove efficacious, unless given in doses adequate to produce a purgative action; and it cannot be doubted that when so administered it is apt to produce extreme depression, and to occasion all the mischief which its adversaries attribute to it. The pulse becomes feeble under its action; cold clammy perspirations take place; the specific gravity of the urine falls below the healthy standard; giddiness, sickness, and violent diarrhoea are prone to occur, and the patient may be thoroughly prostrated. Further, in subsequent attacks of the disease, the gouty symptoms are usually less regular in their appearance than when colchicum has not been so administered; the kidneys are less easily excited to action; the patient is less tolerant of the remedy; and the drug itself exerts far less influence in checking or arresting the attack. But there are few drugs, however safe and however useful, which may not be so employed as to prove pernicious rather than beneficial. Undoubtedly colchicum forms no exception to this rule; but if it is judiciously handled, and administered only in appropriate cases, and in aid, rather than to the exclusion, of other remedies, it is at once manageable, safe, and efficacious. It appears to invigorate rather than depress; it does not render the subsequent attacks of gout irregular, and its influence over the disease remains unimpaired through a long series of years. The experience of the profession is so decisive as to its being harmless—nay, rather beneficial—in moderate doses, and under proper management, that you must not permit yourselves to be deterred from giving it in appropriate cases by the outcry which

ignorance has raised against it. You may fairly ask me to point out in what cases and in what doses it should be administered. It is difficult to lay down definite rules for your guidance in these matters; but I may mention generally that the efficacy of the remedy and the safety of its administration appear to be proportioned to the freedom with which the kidneys act. In healthy persons, who are passing urine of high specific gravity, and loaded with lithates, its administration is safe, and its efficacy conspicuous; whereas in weakly persons, whose kidneys are damaged, and who are passing tolerably clear urine of low specific gravity, its action is unsatisfactory, often depressing, and sometimes dangerous. In the former cases it may be given in full doses, one and a half or two drachms of the tincture daily; in the latter, if given at all, it must be administered in small doses, half a drachm to a drachm daily, and its action must be carefully watched. The large doses of this drug which are often given—three to four drachms of the tincture daily—are depressing and mischievous, even to the most robust, and are quite unnecessary for effecting a speedy cure, if assistance is properly sought from other and appropriate remedies.

When colchicum is given in moderate doses, its mode of action is not very apparent. My own observations lead me to believe that it exercises a specific influence in checking the formation of lithic acid; in other words, that it operates as a catalytic rather than as a stimulant of the excretory organs. I have often given it alone for the purpose of experiment, and no increase has taken place in the quantity of the secretions; and I do not doubt that in the case of J. F—, which we have already discussed, the action of the bowels was not due to the colchicum, but to the purgatives with which it was combined, and in like manner that the increase in the quantity of the urine was attributable to the saline diuretics. Further, colchicum does not produce any increase in the excretion of lithic acid, but rather the reverse—a circumstance which is probably attributable to a diminution in the quantity of uric acid formed in the blood. Be this as it may, the fact that colchicum modifies the course of the disease, and materially shortens its duration, without increasing the elimination of its *materies morbi*, leaves little room for doubt as to its exercising some influence antagonistic to the formation of the gouty poison.

Once more, then, I would urge you to remember that there is no specific treatment of gout; that colchicum, however valuable in appropriate cases, is of little avail in many of the instances you will be called upon to treat; that your first efforts will generally have to be directed towards the promotion of free excretion, and a careful regulation of the diet, and that when the more acute symptoms of the disease have subsided, your principal aim must be to impart tone to the digestive organs, and, by regulating the supply of food, by enforcing active exercise, and by maintaining a free action of the skin, liver, bowels, and kidneys, to prevent the accumulation of uric acid in the blood.

ON HIP-JOINT DISEASE.

By REDFERN DAVIES, Esq., M.R.C.S., Birmingham,
(NOW SURGEON IN THE UNITED STATES ARMY.)

PROFESSOR SYME says—"If the joint is *carious* the patient *must die*." It was therefore with no small amount of astonishment and some slight incredulity that, in conversation with Dr. Sayre, (Surgeon to the Bellevue Hospital, New York,) I heard him say—"From personal experience I do not hesitate to recommend most emphatically the excision of the hip-joint when affected with caries." The opinions of most British surgeons on hip-joint disease are well expressed by Mr. Syme in "Braithwaite's Retrospect," Part XIX., p. 119:—"The result depends chiefly upon the state of the bones composing the joint. If they are carious he *must die*; if they are not he *may recover*. Some operations have lately been performed in London, with the view of remedying caries of the hip-joint, by cutting out the head of the thigh-bone; but this proceeding must have originated and been conducted in forgetfulness of the well-established pathological fact, that when caries attacks the surface of a joint it is never limited to one of the bones which compose the articulation. If the articulating surface of the head of the thigh-bone be carious, it follows, as a matter of absolute certainty, that the acetabulum must be in a similar,

condition. But as the acetabulum does not admit of removal in the living body with any prospect of safety or advantage, no benefit can be derived from taking away a part of the articulation; and therefore *excision of the head of the thigh-bone for caries of the joint should be regarded as no less erroneous in theory than objectionable in practice.*"

Dr. Sayre published in the "American Medical Association Transactions" a long report on Hip Disease, of which I thus make a *résumé*:—

CAUSES.—These are as various as those of any other joint—such as falls, blows, injuries from jumping, sitting on a cold stone or damp place when overheated, or any other extraneous accident which may induce inflammation of the hip-joint. If this inflammation should occur in a strumous constitution, it will continue, unless arrested, until the cartilage and bones are involved, only to terminate in death or deformity. With comparatively few exceptions, I have been able to trace the disordered action to direct traumatic inflammation. It no doubt requires a very close examination to find out these causes, since the disease does not usually follow immediately upon the injuries, but often manifests itself weeks or even months after the accident, so that the patient and his friends naturally forget the accident and its connexion with the disease.

Dr. Sayre considers that the idea of a spontaneous luxation occurring in the third stage is an erroneous one, and says that it has not been demonstrated by a single post-mortem examination, but that, on the contrary, whenever a post-mortem examination has taken place, or the joint has been cut into for exsection, it has invariably been found that no luxation has occurred, but that the head of the bone was still within the capsular ligament, probably much absorbed, and frequently separated from the shaft, thus permitting the trochanter major to slip upon the dorsum ilii. This simulation of a luxation has been taken as the cause producing the peculiar attendant deformity, which is, I believe, due to the muscular contraction and twisting of the pelvis induced by the local irritation.

From this muscular irritation, abnormal pressure of the head of the femur occurs, inducing absorption of the upper and posterior portion of the acetabulum and periosteal inflammation outside, the joint constantly creating new materials, or osteophytes. As this progressive absorption goes on within and fresh deposits are made outside the joint, the acetabulum seems, as it were, to be slipped on to the dorsum ilii.

If the head of the femur is diminished, say three-fourths of an inch (which is often the case), and the acetabulum extends upwards and backwards to the same amount, the gluteal and other muscles keeping the bones in close contact will give one inch and a half shortening to the limb; and the twisting of the pelvis and its rotation on the body will increase the other symptoms, which have been mistaken for luxation.

TREATMENT.—*First or inflammatory stage.*—Together with

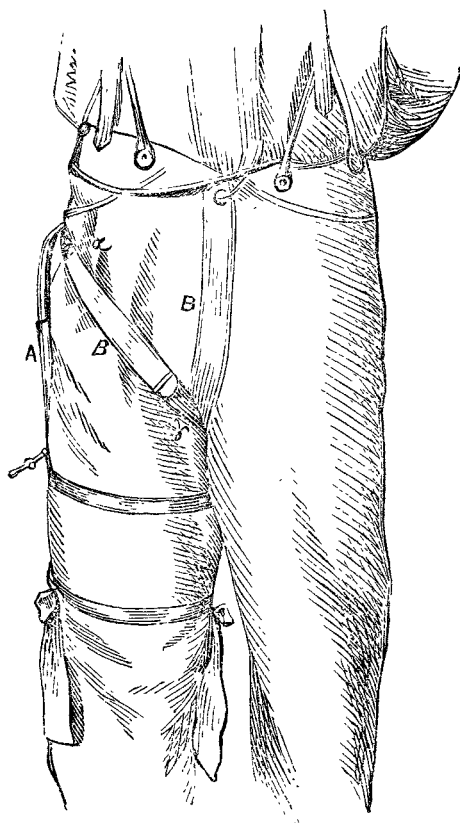
constitutional remedies, *rest of the joint, and perfect freedom from pressure of the inflamed synovial membrane*, are the indications upon which all prospects of success will depend. But since motion is just as essential to a joint as light is to the eye, Dr. Sayre has invented an instrument, of which the following is a description:—

The shaft (A), placed on the outside of the limb, is slightly curved inwards for the last few inches of the upper extremity, which articulates by means of a ball-and-socket joint with the perineal girth. It consists of two portions, the lower ascending or descending, by means of a ratchet and cog-wheel, on the upper. The shaft is grooved, the external surface convex. The lower extremity is simply flattened, having attached to it by buckles a piece of broad webbing, which goes on the *under* surface of the thigh. Fastened to each extremity of the lower or movable portion of the shaft is a somewhat semicircular metallic hoop, having its convexity forwards, and its inner extremities connected together. Strips of plaster are sewn to two pieces of webbing, the plaster adhering to the integuments of the thigh, and, by a buckle on each side of the lower hoop, may be tightened as required. B, Perineal girth, composed of a covered metallic portion (a) to be applied over the ilium; hence curved, the concavity directed inwards. Its extremities buckle to pieces of broad elastic webbing (b), which are attached to a comfortable pad (g) applied to the perineum.

Second stage, characterized by effusion, with eversion and apparent lengthening.—The treatment here must vary according to the condition of the joint, and the quantity and quality of its contents. If the distension, producing excessive local pain and constitutional disturbance, become very great, it must be remedied by art. This is simply imitating nature, which accomplishes the same result by a spontaneous rupture of the capsule. In fact, the opening of the capsule is the only anodyne which will perfectly relieve the pain. The capsule may be artificially opened either subcutaneously, when plastic, and thus diffuse itself into the cellular tissue around the joint; or, when the contents are sero-purulent, by a trocar, as recommended by Boyer. The best place is immediately behind the middle line of the femur, and above the large trochanter, close to the superior border of the glutens maximus muscle, passing thus into the joint just above, and in front of the digital fossa. The contents of the joint having been thoroughly evacuated by movements of the limb, the wound must be carefully closed, and the joint being surrounded with a compress and adhesive strips of plaster prevents air from entering into it. It is well likewise for the patient to wear "Bonnet's wire breeches" for a couple of weeks. Should reaccumulation take place, which it very rarely does, the operation may be safely repeated.

Third stage: Rupture of the capsular ligament, with escape of the effused fluid; inversion, adduction, and apparent shortening.—Should caries have occurred, a spontaneous cure is very rare, especially if cases of periostitis be not confounded in this malady. Nature's mode of cure is gradually to remove the disintegrated bone, substituting for it fibrous tissue, and sometimes ossific deposits. This process always occupies a very long time, and before a curative result has taken place the patient generally sinks exhausted. For other joints affected with caries excision has long been practised; but for the hip, when affected with this disease, the same remedy has been condemned. Of course every case of excision will not prove successful; when either the disease is so connected with a constitutional vitiation as not to be removed by a mere local procedure, or so extensive as to preclude the possibility of its entire removal, excision will be worse than useless. The operation should be resorted to when the diagnosis of caries has been positively ascertained, and should include the entire removal of all diseased bone and cartilage. The wound should be kept open for the free discharge of pus; absolute rest, and moderate extension to prevent the sound bones from coming into contact, should be kept up.

M. Bonnet's wire breeches are fully described and illustrated by Dr. Hamilton in the "Transactions of the American Medical Association for 1857."* When placed in this apparatus, the patient is firmly secured in a comfortable position, protected against the possibility of motion, while he is fully enabled to urinate and defecate without the possibility of the parts being in the least disturbed; it admits even of the patient being carried about and driven out in the open air at will. For the special application of this instrument, as after an excision of the hip-joint, it is necessary to cut in it a window opposite to the wound, so as to allow of its being easily dressed without removing the patient from the apparatus. When the wound



* An engraving of M. Bonnet's wire breeches appeared in THE LANCET of Nov. 22nd, p. 558.

has become reduced in size, the discharge healthy, and the granulations showing a tendency to cicatrize, then to apply Dr. Sayre's splint, and thus allow the patient to take active outdoor exercise, and prevent the chance of ossification of the intermedial substance, which is of a very firm fibrous structure, and in a comparatively short space of time acquires the firmness of whalebone—at any rate, of a sufficient mechanical strength for the support of the patient.

I have had the opportunity of seeing and examining three cases now under Dr. Sayre's care, where he had either performed excision or punctured by a trocar the hip-joint. In all the condition of the patient was most favourable; no inflammatory symptoms, sleeping well, appetite and spirits good, and increasing in weight.

Dr. Sayre does not seem to regard opening a joint by a *free* incision in the perilous light that we look upon it. He compares it to a wound made by a hatchet, which is a large and gaping one, and which he says always heals up well. Now, a small puncture, as from a penknife, is ordinarily followed by much inflammation and disastrous consequences.

The admission of air is universally admitted to be a very dangerous proceeding to a *healthy joint*; but in the case of a *diseased* one, for the purpose of allowing the escape of its contents when they cannot be absorbed, it is only forestalling what nature will do herself. And by attention to the position of the limb, so as to assist the escape of pus &c. by gravitation, some of its effects will be prevented.

ON ERGOT OF RYE IN MENORRHAGIA.

By GRAILY HEWITT, M.D., M.R.C.P.;

PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL;
LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN
AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

THE great therapeutic value of ergot of rye in the treatment of cases of severe menorrhagia has scarcely received that amount of recognition which is its due. In very many cases of profuse menstruation which come before us a treatment conducted on general principles is for the most part successful: we improve the hygienic condition of the patient, and make such alterations in her habits or mode of life as appear to be necessary. In other cases, where the profuse menstruation is dependent on or associated with actual disease of the uterus, presence of polypi, &c., the indications for treatment are of a different character. In some instances, however, the patient before us is the subject of a profuse loss of blood, the sole discoverable alteration of the uterus present being a lax, uncontracted, atonic condition of the organ; and a gentle but continuous oozing of blood is taking place, for the arrest of which we require a therapeutic agent quick and certain in its action, and which is capable of inducing the uterine tissue to contract. Such an agent we have in the ergot of rye. After making trial of its effects in several cases of the kind above alluded to, and having compared the results with those obtained after the use of other remedies, and especially of digitalis, I have come to the conclusion that the ergot is far preferable, and that in pure, uncomplicated cases of menorrhagia it is the best remedy in our possession.

The following case exemplifies, as fully as one case taken by itself can do, the good effects of the remedy in question:—

Mrs. M'G—, aged forty-three, a rather stout woman, of good conformation, came under my care (acting for Dr. Tyler Smith) as an out-patient of St. Mary's Hospital in October last. She stated that she was the mother of thirteen children, the youngest of whom was born a year and a half ago. Menstruation was quite regular up to six weeks ago. The discharge then came on as usual, and lasted for three days. During the night she was called up by a knocking at the door, and imprudently walked over the cold steps to the door, and back to her bed. The discharge was thereby suddenly arrested for a few hours, and then there occurred a very severe flooding. Ever since that time she has continued to lose blood every day, and during every hour of the day, the quantity lost being more or less great at different times. No effect has been produced by the treatment to which she has been subjected, and she is now excessively pallid and anæmic, and so weak that she is hardly able to walk. She complains also of a giddiness in the head, ringing in the ears, and imperfect vision. On examination, I

found blood oozing slowly from the uterus; the os rather soft and wide open, and the whole organ evidently in a very relaxed atonic condition. She was ordered to remain in bed; to apply cold to the hypogastric region; to take a little brandy-and-water and beef-tea occasionally; to drink lemonade, and to take night and morning one teaspoonful of ergot of rye in powder, mixed with a little boiling water. Three days later she sent to the hospital to say that she was much better; that the hæmorrhage had been arrested after the first dose of the medicine, and she was desirous of knowing whether she was to continue it, as every dose "made her so sick." The patient had lost so much blood that it was evident further loss might be attended with danger to life, and it was hardly anticipated that so immediate an arrest of the bleeding, which had been going on for six weeks, would have been procured.

The action of the ergot in determining the cessation of the hæmorrhage in these cases is probably dependent on the contraction of the uterine tissue to which its administration gives rise; it is, in fact, analogous to the action of ergot when given to arouse uterine action in cases of inertia of the uterus, hæmorrhage after labour, &c. The condition of the uterus in a long-standing case of menorrhagia such as that above related is one almost completely identical with that of the uterus after an abortion; the walls are thick and full of blood, and the hæmorrhage continues simply because there is an absence of any tendency to contract. That contraction is produced by the ergot. There does not appear to be any evidence that, apart from its contraction-inducing power, the ergot has any special hæmostatic effect such as has been attributed to it. Some authors have objected to the above theory of the action of ergot in these cases, that in the unimpregnated uterus no contraction, properly speaking, can be said to take place. To this it is sufficient to reply, that if the presence of pains, sharp, short, and like miniature representations of the pains of labour, can be said to be a proof of the occurrence of uterine contractions, then we have proofs in sufficient number. One part of the action of ergot in these particular cases is to give rise to such pains—uterine colic, as they are appropriately termed by continental writers.

The fact that each dose of the ergot gave rise to vomiting in the case above related is worthy of notice. In a subsequent paper I propose to consider particularly the nature of the action of ergot in producing contraction of the uterus in purely obstetric cases, and shall then have occasion to refer specially to this element in the action of ergot—namely, the vomiting and nausea which frequently attend its administration.

Berkeley-square, Dec. 1862.

REPORT OF

TWO CASES OF ENCEPHALON MONSTERS.

By JAMES HADAWAY, L.R.C.P. EDIN.

CASE I.—On Tuesday, the 13th of August of last year, between ten and eleven A.M., I was called to Mrs. J—, living in Clipston-street, by the nurse, who said the labour pains had been coming on regularly the whole of the morning, and she thought my services would soon be required. I arrived there in about half an hour, and, on making an examination, was rather puzzled as to what the presentation was, it being somewhat globular, similar to what one finds in face presentations, but I could not feel either the nose or mouth. In carrying the finger farther round the head I detected the edge of the occipital bone, but could not find either of the fontanels. The pains continued regular every five minutes, and at a quarter past twelve—three-quarters of an hour after my arrival—the child was born, and to my surprise, I found (as will be seen in Fig. 1) an almost entire absence of the parietal bones, and the top of the head representing the appearance of a large nævus. The child was alive, and would suck the finger with great power; but, being such an object, it was thought advisable not to encourage its living by feeding much; it was therefore only supplied now and then with a little milk and water, upon which it lived until four o'clock on the following Friday morning, living altogether sixty-four hours. Every other part of the body was well formed and perfect; the weight of the child (a boy) was eight pounds. The mother got up without a bad symptom, and could not account in any way for such a malformation.