symptoms as they arise, such as pain, irritation of the bowels, diarrhoea, etc. For the latter a mixture containing rhatany, paregoric, and glycerine seems to answer best. Such patients are immensely benefited for a time by being sent, when possible, to some eligible sea-side place, as Margate.

Acute Strumous Hydrocephalus, the result of tubercular meningitis, is not often seen in London hospitals, although tubercle of the brain is very common, at least amongst the out-patients. How many children we find labouring under the following symptoms: a pale, delicate appearance; dilated pupils, perhaps strabismus; frequent headache or heaviness of head; occasional vomiting coming on suddenly, preceded by vertigo and not necessarily occurring after food; a slow and perhaps irregular pulse; capricious appetite; starting or shrieking, or grating the teeth at night, and sometimes epileptic seizures. In the majority of instances there are evidences of scrofulous disease in the chest or abdomen, or in the glands of the neck. Some of these symptoms may be slight, or even wanting, but the indications as to the true nature of the case are generally sufficiently evident. The great fear is lest the attacks of vomiting should be mistaken for simple biliousness, or gastric disturbance of a dyspeptic nature, and treated accordingly. Such an error of diagnosis, and consequent prognosis, would be likely to prove very damaging to your reputation in practice, though hardly so detrimental to the young patients as might be supposed. They are generally greatly relieved for a time by cholagogues, aperients, and even mercurials, followed by stomachic tonics; but the distressing symptoms recur again and again, and before long, more decided cerebral symptoms indicate the true nature of the disease. Sooner or later a fatal termination ensues, whatever treatment may be adopted. These young out-patients mostly attend with great regularity for a considerable time without any marked change, and then we miss them all at once. They have been seized with either convulsions, or coma, or acute hydrocephalus, and are quickly carried off. When the disease has come to this pass, indeed, recovery is worse than death; for they are sure to be afflicted with incurable paralysis (if the central part of the brain have been affected), or epileptic convulsions (if the surface), or the mental faculties will be hopelessly impaired. Other distressing conditions will exist in addition, according as particular nerves are implicated—amaurosis, if the second nerve be affected; ptosis, if the third; double vision and strabismus, if the sixth. As to the treatment of cerebral tubercle whilst still in an early and quiescent state, and unattended by of the graver symptoms, I have always found more benefit from hypophosphites and cod-liver oil, with an occasional dose of calomel and rhubarb, than from any other medicines.

The following case is a fair example. J. B., aged 8, came under my care in January last (1870) as an out-patient. He had always been a delicate and somewhat rickety child, and had suffered severely from the usual diseases of infancy and childhood. His mother attributed his present illness to exposure to the sun the previous autumn. The symptoms were frequent frontal headache; occasional slight convulsive fits affecting the left side; shrieking in his sleep; fretfulness and general excitability; slight otorrhoea; occasional vomiting; and torpid bowels. He was treated at first by mild aperients and stomachics; subsequently by quinate of lime, under which his general health improved for a short time; then by iodide of iron, which seemed to cause more intense headache and general feverishness; and lastly by hypophosphite of soda and cod-liver oil, which he continued a long time with marked, though gradual, improvement in every respect. In June he died almost suddenly. He had fallen down and struck his head against a door. This was quickly followed by complete stupor, with paralysis of the left side, and death two days after. In another recent case of a similar character, a boy's death was attributed to a "smart tap" on the side of the head by a schoolmaster. I need hardly say that this is a culpable way of inflicting punishment on a child under any circumstances; but, in the case of delicate children with latent cerebral disease, it must always be attended with considerable danger.

With respect to the general statistics of deaths from tubercular diseases, I find in the last published annual report of the Registrar-General, that, out of the 480,000 deaths (in round numbers) in England and Wales from all causes, no fewer than 68,300, or about 1 in 7, were from the various forms of tubercular disease. Of these, 16,000 were under five years of age: 51,400 were from phthisis; 7,200 from tubercular hydrocephalus; 6,900 from *tabes mesenterica* (including tubercular peritonitis); and 2,800 from other scrofulous diseases. Of those who died of hydrocephalus, nearly two-thirds were under two years of age; and of those who died of *tabes mesenterica*, nearly one-half were under one year, and almost all under six. Altogether, this is a frightful score; but it is some satisfaction to know that the deaths from tubercular diseases, including consumption, have been, on an average of years, steadily decreasing.

CLINICAL LECTURE

ON

ACUTE SYNOVITIS AND TRAUMATIC ANEURISM.

Delivered at the Leeds School of Medicine.

By T. R. JESSOP, F.R.C.S.,

Surgeon to the Leeds General Infirmary, etc.

GENTLEMEN,—During the two months which have elapsed since I last addressed you in this place, several cases of surpassing interest have been admitted into my wards in the Hospital. From these I have selected two, which seem to me to present special points of importance for comment. The first is a case of acute synovitis of the knee-joint resulting from injury, for the relief of which I adopted a new mode of treatment. Here are extracts from the notes as furnished to me by my dresser, Mr. Heald.

John Handly, a collier, aged 20, was admitted into No. 4 Ward on the 22nd of last November. He stated that three weeks previously, when at work in the pit, he was accidentally knocked down, that he fell with his right knee wedged in between two corves, and that he lay in this position for a very considerable time before he could be extricated. On being placed upon his feet, he was able to walk home, assisted by two of his mates. On the following morning, as the joint was much swollen and very painful, his friends applied for and obtained the help of the dispensary surgeons, under whose care he remained until his admission into the Infirmary. When first seen at the Infirmary, the joint was tense with fluid, appeared twice as large as the left knee, and was hot, shining, very painful, and exquisitely tender. There was a general febrile condition—hot skin, dry tongue, thirst, and rapid pulse. He was ordered to have the limb placed in an extended position, upon a McIntyre's splint; to have eight leeches applied to the joint, and these to be followed by an evaporating lotion. Milk-diet, an aperient, a saline mixture, and a chloral draught at night, were prescribed. On the 30th November an ice-bag was substituted for the lotion. This, I need hardly tell you, is the usual treatment of acute synovitis, and in the majority of such cases will succeed in effecting a cure. In this instance, however, it did not suffice; for, from the time of his admission (the 22nd November) up to the 4th December his condition gradually grew worse; the joint became more tense; the pain did not abate; the febrile condition increased; all the active symptoms remained; and the temperature of his body had reached 102, never having been below 100. Under these circumstances, I determined to adopt a plan of treatment with which I had previously succeeded in an exactly similar case; viz., to open the joint under the protection of carbolic acid.

Your books will teach you that a joint should only be opened when the acute inflammation has run on to suppuration. So long as there is a hope that the inflammation may be subdued, so long are you to withhold your knife; but the moment the inflammation has gone on to the suppurative stage, then the joint is to be opened. That, as a general rule, is good teaching; latterly, however, some surgeons have become dissatisfied with the "usual" mode of treating these cases—finding, no doubt, that in a not inconsiderable number of instances destruction of the joint has been the result—and have ventured to do that which, I imagine, every surgeon of much experience has over and over again longed to do; viz., to give exit to the fluid, whose presence in the joint, by keeping the synovial membrane in a continued state of tension, becomes not unfrequently the cause of destruction. The plan which they have adopted is to tap the joint with a trocar, hoping thereby to avoid the introduction of something which—I will not use the word "germs," for although, as you well know, I am a firm believer in the antiseptic treatment, I am not quite prepared to accept Professor Lister's assertion, that a full belief in the germ-theory of putrefaction is absolutely essential to success in its application to surgery—I prefer to call septic material, the entrance of which would almost inevitably lead to putrefaction and consequent intense suppuration in the joint.

Some time before I saw any account of the treatment of acute synovitis by tapping, I opened, antiseptically, with a bistoury, the knee-joint of a man (a patient in No. 3 Ward) whom you will remember suffering from the effects of an injury received a short time before his admission. The operation was followed by the best possible result.

In the case which we are considering, on the 4th Dec. I made an opening into the joint, an inch in length, in the axis of the thigh, commenc-

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ing an inch above the patella. The immediate result of the incision was, that from eight to ten ounces of clear fluid exuded, but suspended in it were large flakes of lymph, some of which now and then blocked up the opening, so that I was obliged to enlarge the wound to the extent of at least half-an-inch. In making the incision, and in the subsequent treatment, I adopted to the full the directions of Professor Lister, which I have had the privilege of hearing from his own lips.

Now, mark the subsequent course. Here is the temperature chart.

		M.	E.
November	27	 101.2	 100.0
"	28	 101.2	 100.2
"	29	 100.2	 100.0
"	30	 100.0	 100.6
December	1	 100.0	 101.6
"	2	 100.4	 101.2
"	3	 100.2	 101.8*
"	4	 100.0	 101.0
"	5	 100.0	 100.6
"	6	 99.6	 100.0
"	7	 99.6	 100.0
"	8	 99.0	 100.0
"	9	 98.8	 98.8
"	10	 98.0	 99.0
"	11	 98.2	 98.4
"	12	 98.3	 98.4

The asterisk marks the time at which the opening was made. You will see that from that time forth the thermometer showed a steady and rapid improvement; and the benefit was exhibited in other ways. The pain, which had been agonising, at once ceased; the swelling never returned; the febrile condition disappeared. I kept him in the ward until the 2nd January, when he was sent to the Convalescent Hospital with a movable painless joint.

Do not go away with the idea that I advocate the opening of the joint in every case of acute synovitis. But, whenever you have reason to believe that the case is threatening to go on to suppuration, and you have given your patient the benefit of leeches, ice, evaporating lotions, salines, absolute rest, and so on, then you will be justified in adopting the treatment which I have described, with the view of *preventing* suppuration, provided only you make use of the precautions I have recommended against the putrefaction of the fluid remaining in the joint: and I prefer a tolerably free incision to an opening with a trocar, as better calculated effectually to put an end to tension, and because it is essential where, as in the case I have narrated, large flakes of lymph help to fill the joint. I have now adopted this plan in three cases, and in each the success has been perfect.

The second case to which I wish to draw your attention is one of traumatic aneurism in the neck, in dealing with which certain difficulties arose. For the notes of the case I am indebted to my House-Surgeon, Mr. Edward Hey.

William Hays, aged 29, was admitted on November 20th. On the night of the 26th October, whilst walking in the street, he was stabbed on the left side of the neck, just below the jaw. When picked up by the police, he was bathed in blood, blanched, and nearly pulseless. Mr. Corrie, who was quickly in attendance upon him, succeeded in arresting the bleeding by means of a lint-compress and bandage. During the next fortnight, there was occasional slight oozing of blood, and at the end of that time the patient noticed a small swelling just below the wound. On November 19th, at midnight, bleeding came on very violently: it was stopped by compression, but it broke out again at 1 P.M. the next day, and he was then brought to the Infirmary.

On admission there was a wound, about the size of a sixpence, on the left side of the neck, just below the jaw, and about an inch in front of the angle. Immediately below the wound was a small swelling, about the size of a marble. At twelve o'clock on the night of his admission profuse hæmorrhage commenced, and, on removing the bandage, arterial blood spouted from the wound in a thick stream. A pad of lint and a bandage effectually controlled it.

November 21st. At noon there began to be considerable oozing; and, on reapplying the bandage, it was noticed that the swelling in the neck was much larger, being of the size of half an ordinary orange. There was a peculiar huskiness of the voice with difficulty of articulation, like that which is heard when there is pressure on the recurrent laryngeal nerve. I now saw the case, and decided at once to operate. The swelling was freely laid open by an incision commencing at the wound, and extending downwards and outwards to the anterior border of the sterno-mastoid muscle, and several large clots were turned out. Profuse arterial bleeding immediately supervened, but was at once arrested by pressure with the finger beneath the jaw. On careful exami-

nation, it was found that the wounded vessel was effectually concealed by the jaw, and that it would be necessary to cut through this bone in order to get at it. The incision was accordingly extended through the cheek to the angle of the mouth. The coronary and labial arteries were secured with catgut ligatures as soon as they were divided. The flaps having been turned upwards and downwards, the jaw was sawn through just in front of the angle, and the subjacent parts fully exposed. A smooth round tumour, of the size of a filbert, was now seen, which proved to be an aneurism of the facial artery. This was laid open, and the bleeding orifice was seized with artery-forceps, and tied with a strong silk ligature. A small piece of perchloride of iron was placed in a deep recess of the wound, from which a little oozing proceeded. On placing the jaw in position, it became clear that there would be difficulty in retaining the cut ends in apposition. With an Archimedean drill, therefore, corresponding holes were bored in an oblique direction through the fragments, and, by means of a double iron wire passed through them, the bone was tied in accurate position. Four hare-lip pins and two wire sutures were employed in closing the wound. A pad of lint and a bandage completed the dressing. He lost very little blood during the operation.

November 22nd. There had been no more bleeding, and he was very comfortable. The line of the teeth was perfect.

November 25th. The dressings were changed, and the hare-lip pins removed. The whole of the wound made at the time of the operation had healed by first intention. The original wound looked healthy.

He went on well till the 28th November, when he had a severe attack of bleeding from the old wound. This was stopped by the application of ice, and nothing more was seen till December 3rd, when there was slight bleeding from the mouth, and it was noticed that the line of the teeth was uneven.

On December 4th, at midnight, the bleeding recurred with such violence from the mouth that, on being sent for, I determined to open the wound out again. The wire which had fastened the jaw had given way, allowing the fragments to override one another; and both portions of bone were found denuded of periosteum to the extent of about half-an-inch. On turning the bones aside and exposing the parts beneath, blood was seen to pour freely from an opening at the bottom of the wound. The bleeding vessel was transfixed with a tenaculum, and secured by a strong silk ligature. The jaw, having been re-adjusted, was secured with four thicknesses of iron-wire, and the external wound was closed as on the former occasion.

December 5th. There was no more bleeding; the face was rather swollen; temperature in axilla, 105 Fahrenheit.

December 6th. The face was erysipelatous. He was removed to a private ward.

December 7th. There was no spreading of the erysipelas. He took beef-tea and milk well.

December 9th. The swelling of the face was rapidly subsiding. He was ordered to have a gutta-percha splint fitted to the jaw.

From this time he improved quickly. When he was made an out-patient on January 7th, the wound had quite healed, the line of the teeth was perfect, and there was no perceptible movement at the point of division through the jaw.

I will now have the patient brought in for you to examine. It is a little more than seven weeks since the last operation. You will observe the healed cicatrix, extending from the angle of the mouth downwards and outwards over the jaw and neck to the edge of the sterno-mastoid muscle. Put your finger in the mouth and feel that the line of the teeth is quite perfect. Gently manipulate the jaw, and you will observe how securely fixed it is. He can, moreover, open and close his mouth with freedom. He has brought this little shell of exfoliated bone, about the size of half a threepenny coin, which came away through the external wound about a week ago. He has seen nothing of the wire, nor can I make out its outline on careful examination.

I have taken every opportunity when going round the wards of drawing your attention to this case, and I have brought it more prominently before your notice to-day, because I wish it to be the means of indelibly fixing upon your minds the proper mode of dealing with a wounded artery.

When the man first came under my notice at the Infirmary, blood was flowing freely through a small wound from a cavity, which caused a swelling externally as large as half an ordinary orange. On hearing the history of the case, all I could say was, that *some* large artery had been wounded; it was impossible to do more than guess which artery it was; it might be the facial, the lingual, or some other branch of the external carotid; it might be the external carotid itself, or even the internal or the common carotid. Nobody could say. Clearly the blood came either directly from the common carotid, or indirectly from a primary or secondary branch of that artery; and one might have been

tempted, on that account, to place a ligature upon the common trunk, but for the fact which all experience proves, that the only safe mode of dealing with hæmorrhage from a large artery is to place ligatures upon the vessel itself, immediately above and immediately below the wound from which the blood is issuing, or in some other way to secure the vessel at the injured spot. I have seen cases where it has been impossible to get at the wounded vessel; and one case I remember, where the operating surgeon thought proper to place a ligature upon the vessel in its continuity, in preference to tying it at the punctured spot; but, as might have been expected, all the patients died from subsequent bleedings, brought about by the enlargement of the collateral branches, in the manner which I described to you not long ago, when the three cases of femoral aneurism which have lately been under my care formed the subject of my lecture.

Remember that, whenever it is practicable, your safest course is to secure the wounded vessel at the injured spot; and do not let obstacles which can safely be overcome stand in your way. In the instance I have related it was the facial artery which had been wounded—a vessel neither of the first nor of the second magnitude—and yet, because the life of my patient was being endangered, I did not hesitate to make a large wound, nor even to cut through the jaw, in order to secure it at the wounded spot. If the wounded vessel be of moderate size only, less formidable measures will sometimes suffice—such as were in the first instance adopted in the case of William Hays. And it was right, in my judgment, to try these simpler means before resorting to so severe an operation as that which was ultimately deemed necessary; but, when operative measures have been decided upon, such only as I have described will be at all likely to succeed, and, whenever practicable, should be performed. If the bleeding be from an artery of large size, as, for instance, one of the main vessels of a limb, the sooner the operation is performed the better. The employment, in such a case, of compresses and bandages, of tourniquets, of styptics, and so on, none of which are likely to succeed, can only render matters more desperate, by allowing time for diffusion of blood in the surrounding tissues, and for those subsequent changes which, by obscuring the parts involved, make the inevitable operation more difficult, and which are also attended by a condition of surgical fever little calculated to promote the healing of the damaged tissues.

GYNÆCOLOGICAL NOTES.

By ROBERT BARNES, M.D.,

Obstetric Physician, and Lecturer on Midwifery and Diseases of Women and Children, at St. Thomas's Hospital.

II.—OUGHT CONSUMPTIVES TO MARRY?

IT is hard to tell any one, much more a large class, that it is wrong to enter into those social relations which, if wisely contracted and preserved, give the chief charm to life. Indeed, advice upon this matter, although often sought, is often disregarded. Passion and immediate interests submit unwillingly to the cold reasoning of philosophy. Still the problem—Is it to the advantage of the community, or of the individuals primarily concerned, that those bearing the seeds of tubercular phthisis should marry?—is one which medical science may properly discuss.

My own observation tells strongly on the negative or prohibitory side.

1. I have now seen a good many very sad instances where young men and women in whom consumption was either latent, stationary, or slowly progressing, have sunk rapidly after being "engaged", or after being married. The chance of recovery, or even of not getting worse, of a tuberculous sufferer, depends upon observing the strictest hygienic rules; and of these rules a main one is the preservation of mental and emotional calm.

2. I have seen the effect of pregnancy and labour upon many consumptive women. I have no hesitation in saying that there never was a greater fallacy than that which affirms that pregnancy is antagonistic to phthisis. In my experience, labour commonly precipitates the fatal issue of the disease. Some perish during pregnancy; a large number sink rapidly after labour. This last trial breaks down the remaining forces of the system.

3. Consumptive people seem at least as apt in procreation as others. The children whom they bring into the world undoubtedly inherit the tubercular diathesis. How many of these perish quickly of convulsions, or, a little later, of abdominal or pulmonary disease! How few grow up to robust adolescence! And how large a proportion of those who survive to maturity repeat the sad history of their parents, scattering mental and physical distress around them!

All this is too familiar to medical men. Seeing these things on a

large scale, and looking beyond the mere individual aspect of the question, we cannot help noting the disastrous effects of the union of consumptive people upon the commonwealth. Physical degeneracy is stamped upon a large section of the community.

That physical diathesis which, in the easy and well educated, often develops a romantic sentimentalism, distorting the judgment of self and of relations to others, produces, in the needy and badly trained, those forms of mental degradation of which our workhouses, prisons, and asylums give so many terrible illustrations. I entirely concur in the opinions expressed upon this subject by Virchow.

It is clearly our duty to discourage marriage amongst consumptives. Public and private interests in relation to this subject are greatly in the hands of the medical profession. Legislation would be impossible. It is, therefore, superfluous to discuss the policy of legislating. In this free country, the sound legal maxim, "*Sic utere tuo, ut alienum non lædas*," meets with scant respect. It is difficult to forbid obstinate people from spreading small-pox; and the right of inoculating syphilis is so hotly maintained by a large section of the public, that the Contagious Diseases Act even is in jeopardy. But a healthy public opinion may do great good; and this public opinion must be based upon medical experience. Public opinion may, indeed, have little weight upon certain consumptives. Few persons, whilst under the thralldom of the most imperious and selfish of all the passions, will recognise the duty of sacrificing their individual desires for the public good. This form of patriotism has probably never seen many devotees. Families may, however, under the wise guidance of their medical advisers, commonly succeed in protecting their healthy sons and daughters from contracting engagements with tainted aspirants. Firmness in this direction will avert incalculable misery. Of course, this social proscription should not be indiscriminating. An isolated case of consumption breaking out in a family which can otherwise show a clean bill of health, cannot have the same significance as attaches to the multiplied recurrence of the disease in successive generations and different branches of a family. At any rate, in the case of persons actually tuberculous, there ought to be no doubt. In their own interest, as well as in that of those with whom alliance is contemplated, interdiction is dictated.

CASE OF PUERPERAL CONVULSIONS.*

By JOSEPH G. SWAYNE, M.D.,

Physician-Accoucheur to the Bristol General Hospital and Lecturer on Midwifery at the Bristol Medical School.

I have several times, at the meetings of this Branch of our Association, communicated cases in proof of the value of bleeding in puerperal convulsions; but I do not think that I have yet met with an instance so illustrative of the power of this remedy as the following.

On February 13th, 1869, Mr. Willett requested me to see Mrs. J., residing in West Street, Bristol. She was a primipara, aged 32, of rather robust make, who was expecting her confinement in about seven weeks. For a month previously she had been suffering from general anasarca, which had latterly much increased, and for a week before I saw her she had complained of severe headaches. About 10 A.M. on February 13th, she was suddenly attacked with epileptiform convulsions, and these returned about every half-hour until 1 P.M., when I first saw her. She had then had five fits, which had gradually increased in severity. There was almost complete unconsciousness between the fits, and the breathing was slightly stertorous. The pulse was 116. No dilatation of the os uteri or other signs of labour was present. On testing the urine, it was found to be highly albuminous—so much so that it was impossible to estimate the amount of deposit, because the whole of the fluid apparently solidified.

Mr. Willett informed me that in the morning he had purged her freely with calomel and jalap, had applied sinapisms to the nape of the neck and calves of the legs, and had given a diuretic mixture containing acetate and bicarbonate of potash.

As there was no symptom of labour, we both agreed that it would be inexpedient to bring it on; but, seeing the critical nature of the case, I strongly advised that bleeding should be resorted to without delay. Mr. Willett, who had previously some hesitation in performing the operation on account of the feebleness of her pulse, agreed to do so, and accordingly bled her to about sixteen ounces. I saw her with him at half-past five the same evening; she had had no fit since the bleeding, and was becoming slightly conscious—sufficiently so to make us understand that she was suffering pain in the region of the kidneys. We therefore applied a blister to the lumbar region. The convulsions returned about 8 P.M., recurring every quarter-of-an-hour, and increas-

* Read before the Bath and Bristol Branch.