second attack of mental depression associated with lactation. The husband had been warned against further pregnancies.

Present Illness.—Now pregnant about six weeks. Became depressed again, spoke of "frightful forgetfulness" and of having a blank spot in her memory.

In view of the two previous attacks of melancholia, the complication at former confinement, and the apparent beginning of another attack of depression, it was decided that the pregnancy should be terminated.

CASE 10.

Mrs. P., aged 36; seen November 17th, 1924.

Family History.—Two sisters had been under care for mental illness but recovered.

Previous History.—Has had two children. Had been much concerned about husband's money difficulties. Had been depressed since June. Recently had tried to poison herself by gas in a bedroom, but promised not to make further attempts. Had been, however, allowed to sleep in a room alone in a friend's house, and one morning had precipitated herself from the bedroom window, sustaining fracture dislocation of the right ankle, dislocation of the left elbow, a scalp wound, and concussion. She was treated in a nursing home for the surgical troubles, concurrently with which she passed through a severe attack of mental disorder, part of the time being confused and delirious with rise of temperature, and part of the time deeply melancholic with thoughts of suicide. Late in December, when she had sufficiently recovered surgically, Dr. R. H. Cole and I saw her in consultation with Dr. Hill, and came to the conclusion that she should be certified. The husband, however, objected to this, and as the patient expressed her willingness to go under care as a voluntary boarder she went thus to a private mental hospital. She was quickly found to be unfit for voluntary treatment and was certified. Subsequently she recovered sufficiently to be discharged as "relieved" at the end of July, 1925.

In December, 1925, she became pregnant again. In view of the previous severe and dangerous attack of mental disorder there was no hesitation in giving the opinion that the pregnancy ought not to be allowed to continue.

With regard to the second group, it may be said that in each case the question of the health of the mother was the primary factor, as in all these cases the child was not "viable."

I agree with the views expressed by Dr. Fairbairn at the joint meeting of the Medico-Legal Society and the Section of Obstetrics of the Royal Society of Medicine, that only purely medical considerations should be allowed to weigh in deciding as to termination of pregnancy.

It is interesting to note the views expressed by legal authorities in the discussion of January 21st, 1927.[1] For instance, Lord Riddell is reported to have said that "induction was not only justifiable, but a duty when the pregnancy indicated grave danger to the mother's health, whether the result was likely to be permanent or not."[2] Sir Travers Humphreys said the practitioner "was not entitled to let anything weigh with him except the health of his patient—her medical welfare as distinct from her social or economic welfare."[3] Earl Russell is reported as leaning to the German view which Lord Riddell had quoted, "in which it was insisted that the foetus was not yet an independent human being, and that every woman, by virtue of the right over her own body, was entitled to decide whether it should become one." Mr. Justice Salter, in summing up the debate, is reported as having said that if abortion were ever sanctioned outside the medical area—in the interest of eugenics, for example, or for economic, social, or personal reasons—he would have great fear that within the medical area there would arise a large class of pliant doctors who would be easily persuaded that there were sufficient medical reasons in a given case. He was certain that if it were ever proposed to extend the liberty of abortion, the spirit of unswerving opposition would arise again as it did in the attitude of the early Christian Church towards abortion.

In the *Journal of Mental Science* for July, 1927, is published a paper by Dr. J. R. Lord, President of the Royal Medico-Psychological Association, on the induction of abortion in the treatment and prophylaxis of mental disorder. He concludes that the only morally sound reasons for inducing abortion are medical: (*a*) to preserve life, (*b*) to alleviate or cure serious physical or mental illness, or (*c*) to prevent serious ill health, physical or mental, whether permanent or temporary.

The cases I have recorded seem to me to be of importance as showing the questions which have to be taken into consideration in each case as it arises.

REFERENCES.

[1] BRITISH MEDICAL JOURNAL, January 29th, 1927. [2] Ibid., p. 188. [3] Ibid., p. 189.

THE TREATMENT OF "TENNIS ELBOW."

BY

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THERE is probably nothing which brings the surgical profession into greater discredit at the present time than its inability to cure a "tennis elbow." The condition is extremely common, and so helpless have we been in its treatment that most sufferers now never consider consulting a medical man at all. For while we have been gravely considering what may be the pathology of so curious a condition the osteopaths and non-medical manipulators have been curing the patients in hundreds. Let us neglect pathology and consider what we really know about it clinically.

In the first place it is almost confined to tennis players, golfers, and workers in certain trades which involve the constant use of a hammer.

Secondly, the onset of the condition is insidious; there is seldom a history of any sudden strain or accident.

Thirdly, the patient can commonly do anything with his arm without pain except the particular exercise with which the pain is associated. On the other hand, during the acute stage at any rate, a patient may suddenly bungle some perfectly simple action owing to his accidentally getting his arm into the position which produces the pain. A favourite trick of this sort is to drop a tea-cup when reaching out the hand to take it from a tray. Indeed, the action of holding a tea-cup will often produce the pain of tennis elbow, and the fact is of help in making a diagnosis.

Fourthly, in the acute stage, which may come on rather suddenly and in which the patient simply cannot hold a racket at all, there is a very strong subjective sensation that "something is out of place."

Fifthly, all these symptoms are present without any physical signs adequate to explain them. This represents only a superficial point of view and is not strictly true. I shall return to it later.

Finally, the condition is frequently cured by non-medical manipulators by some form of forcible manipulation. The test of cure is that the patient can play tennis without pain, or with only a feeling of soreness quite different from the incapacitating pain.

These, I think, represent the generally recognized facts; at any rate they were the facts known to me when I first began to take a special interest in the subject. I happened at this period to come across a number of cases in a short time. I found in all the recognized tender spot, which varied in position but was usually just above or below the external epicondyle, and, as had been described before,[1] that the pain was often produced by complete flexion of the wrist and fingers; also that on superficial examination all movements were complete. When, however, I specially examined combined movements, this was not the case. Frequently, for example, with full pronation combined with complete wrist and finger flexion the elbow would not come perfectly straight, or if it did come straight there was a distinct feeling of resistance and the process was painful. This is, of course, a complicated movement, but a similar movement of the opposite limb was free and painless. This fact, together with the known frequency of cure by forcible manipulation, strongly suggested that forcing the restricted movement might bring about the desired result. My first case was rather dramatic. The patient was a big strong man, and I insisted on an anaesthetic. Under nitrous oxide I wrenched the arm as follows: with the wrist and fingers flexed and the forearm fully pronated I forced the elbow into hyperextension, making at the same time firm pressure with my left thumb over the tender spot by the external epicondyle. There was a snap like a pistol shot and the horrified anaesthetist insisted that I had broken the arm. The cure was as dramatic as the manipulation. It was a long-standing case and had never been very severe, but the patient assured me that for the first time for many years he was able to take a hard back-hand volley without pain. Further experience has shown me that there is not always so loud a noise,

but in every case I have felt a click or snap which, though perfectly obvious to the hand, was not always audible. In recent cases it is little more than the feeling of something giving way.

I have performed this manipulation both with and without an anaesthetic, and so far have not had a failure. This does not mean that I have manipulated every patient who came to me thinking he had a tennis elbow, for in some of them I could not satisfy myself of the diagnosis. But all those who had the physical signs detailed above (and they were by far the greater part) were cured by the manipulation I have described. In all cases a short nitrous oxide anaesthetic is preferable, and in chronic cases I believe it is essential. The manipulation is painful, and few patients will allow one to use the force necessary to cure a chronic case, where presumably the adhesions are firm. As regards after-treatment I believe that none is necessary. A few days' rest from tennis may be indicated if the elbow is sore from the manipulation, but otherwise the sooner the patient returns to the game the better. The need for prolonged after-treatment would suggest to me an incomplete manipulation.

While the hypothesis of "adhesions" will explain many cases it is difficult to fit it in with some acute cases. I recently saw a well known player on the first day of an important tournament. He said his elbow had "gone out"; he could not hold a racket, and he had to compete again during the afternoon. I found exactly the physical signs described above, and on manipulation, which caused severe pain, there was a definite click under my thumb. He got up, tried his arm, and said it "had gone in again," and he played through the tournament with a sore but useful elbow.

Now "adhesions" cannot come on suddenly like this, and one is compelled to conclude that something is out of place. If so, may it not be the same thing in the chronic cases also, and that the malposition has become fixed by adhesions? The whole condition presents many similarities to that of a semilunar cartilage in the knee. Here, however, we have no semilunar cartilage, but we have a very unusual type of joint. The head of the radius is necessarily very loosely attached to the orbicular ligament to permit rotation, and it is possible that a part (possibly a torn part) of this ligament may occasionally slip between the head of the radius and the capitellum. This would interfere with extension just as displacement of a semilunar cartilage interferes with extension of the knee. Another curious analogy is that the successful method of treatment which I have described above is almost exactly similar to the method of reducing a displaced semilunar cartilage so ably developed by Sir Robert Jones. If we consider pronation in the forearm to correspond to internal rotation of the leg the analogy is almost complete.

Conclusions.

1. The majority of cases of "tennis elbow" present characteristic symptoms and physical signs.
2. These cases can be cured by the simple manipulation described above, preferably carried out under nitrous oxide anaesthesia.
3. The pathology of the lesion is uncertain, but it is suggested that in acute cases a portion of the orbicular ligament may slip between the radial head and the capitellum.

REFERENCE.
[1] Fisher: *Manipulative Surgery.*

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

OPTIC NEURITIS AND SPHENOIDAL SINUSITIS.

HAVING read the illuminating discussion on optic neuritis published in the BRITISH MEDICAL JOURNAL of November 12th, and having remarked the scepticism concerning sinus infection as a cause of optic neuritis, I was prompted to record the following case as an example of a frankly rhinogenic optic neuritis.

Miss X., aged 24, was admitted to the General Hospital, Birmingham, on November 27th, 1926, complaining of morning nausea and vertigo of twenty-one days' duration, frontal headaches of increasing severity and of fourteen days' duration, and sudden partial loss of vision in the right eye since three days previously. The latter symptoms coincided with a paroxysmal increase in concurrent symptoms. Except for measles as a child, and a chronic nasal catarrh during the past few years, she had enjoyed quite good health.

Routine clinical examination revealed no abnormality in any system except the ocular. A leucocyte count, however, showed slight increase—that is, 12,400. The visual acuity was: right eye, 6/8; left eye, 6/6 partly. Perimetry demonstrated slight narrowing of the temporal half of the right field of vision. The left visual field was normal. Both fundi presented engorged veins and very full arteries with a well marked light reflex. Haemorrhages were freely scattered about, some around the disc and many extending far out into the fundus; they issued from engorged venules. Papilloedema of the right disc was remarked to the extent of 4 diopters, whilst the left disc exhibited an area of oedema on its nasal half. No retinitis was noted. *X* rays could show no abnormality of the nasal sinuses, and no evidence of increased intracranial pressure.

Under expectant treatment the visual acuity improved almost to the normal, and the papilloedema subsided.

Operation on Sphenoidal Sinus: Recovery.

From time to time exacerbations of headache and photophobia occurred, and each exacerbation was accompanied by increased nasal catarrh and fresh crops of retinal venous oozing. At the end of six weeks Mr. Musgrave Woodman removed a septal spur on the left turbinate, which prevented good access to the sphenoidal sinus. The left sphenoidal sinus was then found to be enlarged and heavily infected, containing thick flakes of pus. The right sphenoidal sinus was small and was slightly infected. From the pus a feeble growth of pneumococcus was obtained and an autogenous vaccine made.

After the radical treatment no fresh haemorrhages were remarked, the headaches cleared up, and in three months, when she was examined, the fundi looked quite normal.

I wish to express thanks to Dr. K. Douglas Wilkinson for permission to publish this case.

In this case of severe optic neuritis a very definite focus of infection was demonstrated in the sphenoidal sinus, and, although subjective eye symptoms cleared up with expectant treatment, objective eye signs still remained, along with subjective symptoms due to sinus infection. Operative treatment effectually dealt with the infection, and the patient was in perfect health three months afterwards. Had she not undergone operation I am very much inclined to believe that she would have led a miserable existence for years, suffering from time to time a recrudescence of eye symptoms due to an intermittently recurring flare-up in the nasal sinuses.

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WIRE BRISTLE IN THE BOWEL.

THE early history of this case led to the patient being unjustly suspected of bringing his trouble on himself.

During the night of September 20th-21st, a boy, aged 14, had colicky pains referred to the region of the umbilicus. He confessed to having feasted on green apples on the previous night; his mother administered castor oil, but without result. On the morning of September 22nd, no movement having taken place and no flatus passed, an enema was given. The bowels moved one hour later. In the afternoon colicky pains recurred and retching, which had been present during the night, gave place to vomiting. The vomited material was black and very foul smelling. The temperature had risen to 99.8° F. and pulse was 142. The hernial openings were closed, no tumour could be felt, and the rectum was clear. There was fluid dullness in both flanks. Laparotomy was decided upon.

The abdomen was opened by a right paramedian incision. Distended loops of small intestine presented through the wound. Examination by hand revealed a constriction near the caecum, and this portion was delivered. A piece of wire was found piercing the ileum and passing into an appendix epiploica on the caecum, pinning another loop of ileum between. On removing the wire the obstruction was relieved immediately. The bowel and mesentery seemed viable. The peritoneal exudate was not evacuated and the wound was closed in layers without drainage.

On September 23rd the abdomen was distended, but flatus was passed after the administration of a dessertspoonful of liquid paraffin every hour, and 0.25 c.cm. of pituitrin every half-hour, for two hours. Distension was present on September 24th, but the bowels moved after three doses of 0.5 c.cm. of pituitrin given hourly. Since then convalescence has been uninterrupted.

The piece of wire measured 1 5/16 in., and was identical in appearance with a wire bristle from a pot cleaner. The patient's mother thinks that the wire must have been swallowed with porridge, but the patient has no recollection of having done so.