diminution in the size of the glands; in fact, this procedure may do more harm than good, as it not only leaves part of the infected organ behind, but also leaves a raw surface to heal by scarring and the subsequent formation of those very pocket-like crypts which seem so dangerous.

Conclusions.

1. In the majority of cases (80 per cent.) of chronic cervical adenitis where no obvious source of infection is present the tonsils are infected.

2. The size of the tonsil makes no difference to their infectivity, except that the small fibrotic variety is likely to be more dangerous than the large.

3. The number of cases in which tubercle bacilli are present is relatively small, but is larger than in simple cases of enlarged tonsils.

4. The frequent presence of other organisms than the tubercle bacillus in these cases suggests that a large proportion of the so-called chronic tuberculous glands are in reality chronic septic glands.

5. The organisms are present in the deepest parts of the gland, and are therefore only removed by operations involving complete enucleation.

My sincere thanks are due to the surgeons and assistant surgeons at Guy's Hospital; to Mr. J. F. O'Malley, of the Evelina Hospital for Children; and to Mr. G. E. Waugh, of Great Ormond-street Hospital, for their valuable assistance in providing most of the above cases.

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SHRAPNEL LOCATED AT BACK OF ORBIT; SUCCESSFUL EXTRACTION.

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Rifleman —, aged 21, was struck by two shells near Ypres on July 4th. One struck him in the face, "blinding" him, and the other inflicted several wounds on the left arm. At the first dressing station shrapnel was removed from the arm, and the eyes, which could not be opened, were bandaged. He was conveyed to Poperinghe, where it was found that the left eye was uninjured and the vision of it good. The lids of the right eye were separated with difficulty owing to swelling of the conjunctiva, and the vision was reduced to bare perception of light. Five days later he was transferred to Boulogne and thence to King George Hospital, where he was admitted on July 23rd.

On admission the patient showed evidence of shock and suffered from pain in the right side of the head and from insomnia. There was some "peppering" of the nose and left cheek with small fragments of shrapnel, and there were several suppurating wounds in the left upper arm. The right eye showed great chemosis, the conjunctiva overlapping the cornea and rendering separation of the lids difficult and painful. There was slight proptosis. The anterior chamber contained a little greyish-green pus, and there was no vision. The vision of the left eye was normal, pupil active, no photophobia. No external wound in the neighbourhood of the right orbit could be detected. A radiogram taken by Dr. W. Ironside Bruce showed a

large fragment of shrapnel, apparently situated deeply in the right orbit adjacent to the base of the skull. No cerebral symptoms were detected though the patient was "nervy," complained of severe headache, and could not sleep. His temperature rose at night to about 101°F., but this might be due to the condition of his left arm.

On July 28th, under chloroform and ether administered by Dr. P. F. Wilson, I examined the right eye and excised it; in cutting the optic nerve my scissors scraped against metal. Some small splinters of bone were removed on irrigating the socket. I then passed the index finger deeply into the orbit,

Skiagram showing the piece of shrapnel *in situ*. The inset shows projectile, exact size.

and at its apex detected a large piece of metal jammed into or against the inner and posterior walls of the orbit. I passed a pair of stout sequester forceps along my finger and seized the fragment; rotating it gently, I freed it from the bone and cautiously extracted it. No other foreign body nor loose fragments of bone were to be found, and after thorough irrigation with boracic acid lotion some iodoform was puffed in, a fair-sized drainage-tube from the back of the orbit inserted, and the orbit lightly dressed. Mr. J. Eduardo Rivera (house surgeon) assisted me. Before the patient recovered from the anæsthetic Mr. F. S. Piggott scraped the sinuses in the left arm and inserted tubes.

The excised eye was in a condition of panophthalmitis, the vitreous chamber contained pus; the recti and their sheaths were adherent to the globe and a furrow appeared to have been cut in the equatorial region of the eye on its inner aspect. Presumably the foreign body had entered through the palpebral fissure and passed between the globe

and inner wall of the orbit. The size and shape of the piece of shrapnel removed are shown in the accompanying sketch, and the radiogram (supplied by the kindness of Dr. G. Harrison Orton) indicates the location of the foreign body in relation to the orbit and the base of the skull.

The progress of the patient was uninterrupted to complete recovery. He ate and slept well, the headache disappeared, and the pyrexia subsided. The right orbit is quite healthy and will soon be fitted with a glass eye. The vision of the left is 6/6 and J.L.

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MASSAGE IN THE AFTER-TREATMENT OF THE WOUNDED.

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FOR some months past reports have, with varying frequency, reached me the tendency of which is to show that all is not as well as it might be with the after-treatment of some of our wounded, so far as that consists of massage. Letters that I have received indicate that some operators are unnecessarily violent in their massage treatment, a fact borne out by the attempts of patients to evade their masseur on his arrival at hospital in order to escape treatment. Another letter tells of "the strange things done under the name of massage," and another from a county town in the Midlands runs as follows: "I believe Madame ——'s method is being used here. There are people doing it in hospital after only 12 lessons." Of course, I am unable personally to vouch for the truth of this statement, but the good faith of the writer is patent throughout the letter.

Let me hasten before going farther to offer praise where it is certainly due. Most of the massage work that is being performed for the wounded is carried out by members of the Almeric Paget Massage Corps. Many members of this corps are giving their services voluntarily, some with magnificent self-sacrifice and others for no more reward than their bare board and lodging, while the remuneration of those who receive any cash payment at all is quite inadequate to the services performed. Most members of this corps hold the certificate of the Incorporated Society of Trained Masseuses, and no greater proof of efficiency can be obtained in this country. I have had the highest respect for the examination that precedes the granting of this certificate since it was my privilege to witness its practical portion in June of last year. A moment's thought, however, shows the great difficulty of estimating the sufficiency of a candidate's technique for all varieties of treatment that she may be called upon to perform in practice. It cannot but be that some are certificated who may be unfitted by temperament, training, or experience to undertake the special class of work to which they are now called—however great may be their skill and proficiency in other branches of massage. For the massage treatment of recent injury and that applicable to any chronic ailment differ fundamentally both in principle and practice.

My evidence compels me to the opinion that a very real evil exists; and I am anxious to do what I can to draw to it the attention of those surgeons

whose good work is being undone by injudicious after-treatment, to explain its origin, and to venture a suggestion by way of remedy. The evil originates partly in ignorance and partly in misconception. The masseur arrives at the bedside, or receives his patient elsewhere labelled "Massage required for this case." He finds, let us say, a scar on a limb and one or more joints quite stiff, and the patient complains of pain—perhaps constant, perhaps only on attempted movement. The masseur then elicits what information he can from his patient, which usually amounts to the date of wound and of operation, if any. He can learn little or nothing as to what tissues were injured or what was done at the operation, unless he has the good fortune to find a radiograph to help him. Even this is of doubtful service seeing that the masseur is no X ray expert. He thus learns little or nothing of what has happened, and can only surmise that the joints are to be bent or straightened. He does not know—usually it is impossible for him to discover—how far either movement may be impossible owing to anatomical injury or deficiency. And let us remember in further extenuation that the masseur is not a diagnostician to distinguish, let us say, a neurosis from a traumatic neuritis, or symptoms due to the severance of a nerve from those subsequent to extensive operation for tendon suture. Hence he guesses at the task which he believes that his surgeon has set him, tackles the obvious cause of disability, and seeks to obtain movement in all joints that lack it, to the limit either of his ability or of the endurance of his patient.

The misconception under which the masseur usually labours is that stiffness is due to the presence of adhesions, which it is his duty to "break down." But here is no part of the work of the masseur; it is the surgeon's work and is performed by him—under an anæsthetic if necessary. Thus, when a patient is recommended for massage there are (or should be) no adhesions in the joints capable of being "broken down." Limitation of movement may be due to anatomical defect; if so, the masseur should be informed. It may be due to the contraction of a scar, of muscles, of ligaments, of tendons, or to a general matting together of the soft parts. No amount of sudden stretching or pulling can effect a cure of any of these conditions. Progress must be slow, and the more gently the treatment is performed the more rapid will be the result. Nature has ordained that the most rapid and perfect method of curing an injured limb is to restore its function, and, if use is possible, the more it is used the quicker will be the cure. If the limb is subjected to treatment that causes pain, some period of time during which it might have been in use is wasted by the necessity of keeping it at rest while the pain passes off. Thus the dose of movement given daily should be the maximum that does not cause more than a transitory twinge. If painless movement is impossible, it is the masseur's duty to attempt so to relieve the irritability of the nerves, or so to manipulate the soft parts, that he may be able on a subsequent occasion to give his first dose of painless passive movement. A little later he can prescribe ever-increasing doses of painless active movement.

Then, again, the disability may be due to what we can only describe as the "functional joint." By this is meant a joint in a limb which, having received injury, is found on examination to be rigid, but which is possessed of perfect function