racic duct is said to have been ruptured as the result of injury; but the case is doubtful.

The fluid which escapes in injury of the lymphatics may be pure limpid lymph, or mixed with inflammatory products or with blood. That which exudes in cases of dilatation is white; and has been described by some as chyle or even as milk. The difference in the two cases is connected with the variable amount of fat. In lymphatic varix, there is a large amount of fat in the fluid. Whence does this come? Rupture of the thoracic duct may give rise to effusion of chylous fluid in the thorax. Dr. Cayley has recorded, in the *Transactions of the Pathological Society*, a case of rupture of the receptaculum chyli. True chyle may be effused in consequence of rupture of the lacteals.

The presence of filariæ in cases of chyluria has led to the idea that they have a causal connection with this condition. But, as they are also found in cholera-stools, and in various diseased conditions as well as in health, Dr. Curnow hesitated to accept them as the cause of chyluria. It is difficult to explain the regurgitation of the chyle into the renal system; but the hypothesis of a leakage from the chyliferous vessels is untenable. Those cases of hydrocele in which the contents are milky afford a clue to the cause. They are to be attributed to the bursting of varicose lymphatics; and it is reasonable to assume the existence of lymphatic varix in cases of chyluria. The presence of fat may be explained by degeneration of the lymph-cells in the lymph-sinuses. The epithelioid lining of the lymphatic system is an important factor in the production of the fluids to which reference has been made.

Dr. Curnow next commented on the aid which pathological changes gave in the study of the circulation of the lymph. At the receptaculum chyli, the *vis à fronte* comes into play, and the flow is aided by the stream in the subclavian vein. Hence impediment to the circulation from heart-disease has an influence on the flow of lymph.

Referring to leucocythæmia, Dr. Curnow said that it ought not to be regarded as a pathological sign of one morbid condition. There is no hard and fast line between a normal and an excessive amount of white corpuscles in the blood; and the blood must be more often examined in various conditions before an excess of white corpuscles can be assumed to be pathognomonic of any one morbid state.

SOME VARIETIES OF SORE-THROAT.*

By R. L. BOWLES, M.D., Folkestone.

IN answer to the call of our Honorary Secretary, I have the honour to bring before your consideration the following notes on "sore-throat". Lately, a friend of mine at a distance pronounced a case one of inflammatory sore-throat; a few days later, the same case came under my care as quinsy. On another occasion, my friend saw a case of what he again called inflammatory sore-throat, which this time turned out to be what is commonly named an ulcerated throat of the diphtheritic kind.

For these reasons, and from the fact of finding many of my medical friends in the same state of confusion as I am myself, I relate the following cases somewhat minutely, as they are good types of two forms of sore-throat.

CASE I.—A lady went to bed feeling indisposed; she had a bad night from fever, headache, pains in the limbs, and sore-throat. In the morning she was very ill, and I found a deposit, looking already like a large loose slough, on each tonsil. The tonsils were somewhat enlarged, of a very deep red colour, soft looking, with loose folds of tumid and oedematous mucous membrane. The next day in the evening, the slough had gone, and the tonsils looked ulcerated; but, in consequence of the folds of mucous membrane, it was not possible for me to be absolutely certain on this point. The illness lasted three days, and left her very weak. The husband had suffered from a precisely similar throat four or five days previously, and a maid and a sister some days before them. The gentleman and lady had been visiting where the sister and maid had just suffered, and where there were bad smells in consequence of the frost having stopped the water-supply.

CASE II.—On February 6th, I was called to see my boy at school in Folkestone; he had passed a very bad night, with soreness and dryness of the throat, and was now suffering from weakness and a dry husky throat, such as is found at the commencement of laryngitis. He had gone to bed the preceding night, as far as he knew, perfectly well, and wholly unconscious of approaching illness. I found the lymphatic glands of the neck swollen and tender, with general infiltration of the cellular tissue; the tonsils were enlarged, of a pinkish red colour, smooth and dense looking, whilst from twelve to twenty white spots were dotted about at pretty even distances upon their surfaces. These spots were

elevated like commencing small-pox pimples, and were evidently covered by the thin transparent, almost unaltered, mucous membrane. One or two of the spots appeared to be exuding their contents; the soft palate and uvula were tumid and inflamed. The boy looked white, with glassy eyes, and felt evidently very ill; his pulse was quick, and skin dry.

He was conveyed home, and a dose of castor-oil was given, and subsequently at intervals doses of liquor ammoniæ acetatis and tinctura aconiti were administered. In the evening, he was somewhat excited in manner, and had a great craving for food. Temperature 101.2 deg.

February 7th. He had passed another most uncomfortable night. Pulse 108; temperature 101.2 deg. The neck was still as swollen, and the tonsils were scarcely altered, except that many of the white spots upon them were now open, and they looked somewhat larger (from the size of a large pin's head to that of a grain of linseed). It was necessary to repeat the castor-oil, after which the boy felt very sick, and would take nothing all day, partly from nausea produced by the oil, partly from feeling so much soreness of throat. He had two very foul evacuations after the oil had been given; and at night, although he felt no better, his throat inside was rather of a paler hue; some of the spots had gone, but others were larger; the lymphatic glands were more tender. Pulse 116; temperature 102.4 deg.

On February 8th, although he had had a very wretched night, with short snoring sleeps and throat-distress, feverish restlessness and headache, the pulse had gone down to 100, and temperature 100.8 deg. The cellular tissue of the neck was less distended, but the glands were very sore and tender; the spots inside were larger and tending to coalesce, and, at the bottom, close to the root of the tongue, were two membranous patches nearly as large as a threepenny-piece; from a very careful inspection, I formed the opinion that these patches were coalesced follicular deposits flattened out by the pressure of the base of the tongue. He had subsequently a loose action of the bowels, with the passage of a large quantity of free bile.

February 9th. On the previous evening, he had been again worse, and had afterwards a trying night; but this morning his temperature was only 99.4 deg., and pulse 86. The follicular deposits were fewer in number, and the larger patches below were breaking up; but there was a thin transparent film surrounding the uvula. His urine, which deposited lithates largely, was of specific gravity 1040, free from albumen and sugar.

From this time, he gradually convalesced, but remained weak and white for a fortnight. He was isolated for eight days, and no other case occurred.

Five or six other boys in the school had troublesome colds about this time; but the weather was so bad that this was not surprising. A week or two previously, the water-supply to the closets was deficient in consequence of the frost, and the town drain had been open a hundred yards away, but there was no palpable unsanitary condition in the house.

Change the names, and, *mutatis mutandis*, the beginning of this case was precisely parallel with the cases of two children formerly reported to this Society, both of whom were attacked at the same time, and as suddenly; the state of the throats in both cases could not have been distinguished from this one, nor from each other; the swollen cellular tissue and lymphatic glands were alike, and the general disturbance of the nervous system corresponded. These two children had been out in the country together one or two days previously, but lived in different houses, and were otherwise under different circumstances. From one of these, my eldest child took diphtheria as severely and in as well marked a form as I ever wish to see, and every one in the house who was allowed to enter her room had milder forms of the same disease; whereas those in the same house and otherwise under similar circumstances who were not admitted into the room were wholly unaffected; so it seemed probable that it could not have been the house which was in fault.

On the other hand, no one in the house where the other child was ill suffered in any way.

On the same day this last February that my boy was attacked, another boy aged eight, in a different part of the town, also complained of not feeling well, and of sore-throat; and, when I saw him two days later, he had swollen lymphatic glands and swollen tonsils with follicular deposits in front, and some membranous-looking patches as large as a sixpence below and behind and on the back of the pharynx. Two days later, the tonsils were quite free from membrane and reduced in size, but he had a sharp cold in the head, and subsequently cough with fine rhonchus. The case was isolated for ten days, and no one in the same house caught the disease.

Now, it always is of very great importance, for many reasons, to arrive at a correct diagnosis in these cases; for, if it be of the infectious

* Read before the East Kent District of the South-Eastern Branch.

variety, all the anxious questions connected with the details of isolation come thick upon us, and must be dealt with; but, if it be catarrhal only, we do harm by treating it with iron perchloride and such like remedies; possibly—aye, indeed, probably—increasing the fever and taking away the last chance of preventing the formation of that most painful and miserable complaint, a tonsillar abscess.

Of course, a typical case of diphtheria affecting the fauces we should all at once recognise, and deal with in the typical fashion; but, unfortunately, in nature the exceptions to types are so common, that we must ever be in a frame of mind to believe almost anything possible.

In quinsy, I believe, the original inflammation, with its consequent abscess, always arises in the structures *behind* rather than *in* the tonsils. The excessive pain of using the muscles of deglutition in the very beginning of the attack, when often there is very little to be seen amiss with the tonsil itself, the deep-seated soreness, and its frequent connection with rheumatism and gout, suggest muscular and fibrous tissue-origin, and the nature of the pain when the muscles are in action puts one forcibly in mind of stiff-neck and lumbago.

In the three cases (taking quinsy as the third) now described, I only proposed to myself to define accurately the anatomico-pathological conditions which came under my observation, and to urge that it is of some importance to form an accurate judgment in the early stage of a case of sore-throat, in order that the patient's family, as well as the patient himself, may know what to expect and what to do. These three conditions may be compared to the various ophthalmic inflammations: the first, where there is conjunctivitis with chemosis and sometimes sloughing of the cornea; the second, where the sclerotic and deeper structures are invaded; and the third, a post-ocular inflammation with possible consequent abscess.

Of course, there may be modifications and combinations of these conditions in both throat and eye inflammations; but the greater prominence of one or other will be a partial guide to us in our prognosis and our treatment. I am not desirous, on the present occasion, of dealing with anything but facts; but I cannot help hazarding the strong opinion I entertain, that the first class of cases, in which the mucous membrane is specially attacked, and a large loose slough rapidly forms, is more particularly connected with bad drains, and that it is not *true* diphtheria, although I am quite prepared to find that diphtheria may supervene upon this, as well as upon any other inflammatory affection of the throat.

Since writing the above, I have read with much interest the paper on what he named "Spreading Quinsy", by Dr. Cornelius Fox, in the BRITISH MEDICAL JOURNAL of December 7th, as well as all the letters and notes which have subsequently appeared, and which have chiefly been called forth by that paper; and I am bound to say, it is most unsatisfactory to find such utter confusion prevailing on a subject upon which, perhaps almost more than any other, we are called to guide and advise our anxious patients.

To me it appears impossible to be sure, on first seeing a case of sore-throat, whether it will be diphtheria or not, even indeed if there should be false membrane. It is now almost certain that some low organism has an influence over the origin and propagation of true diphtheria, and it is very probable that these organisms only find a suitable soil in lowly vitalised or perhaps decayed animal matter, in a manner similar to the mycelium in the thrush of infants enfeebled by illness or want of care. So, in local inflammations, especially of the throat (whether from cold, chill, or other cause), the organism of diphtheria may readily find a suitable soil in the thrown-off epithelium and decomposing exudations of the inflamed mucous membrane.

We should, therefore, be careful and tentative in the opinion we give on first seeing a case of sore-throat. Still, I am full of hope that if we all steadily set to work to observe carefully, to define our cases clearly, and at the same time bring into prominent relief all the attendant circumstances, we shall not be long before we bring order out of chaos, add another claim to medicine as one of the exact sciences, and so enable it more adequately to fulfil its mission of rendering aid to suffering humanity.

ANDERSONIAN STUDENTS' MEDICAL SOCIETY. — The concluding meeting of this society was held on March 22nd, in the Physiology Class-room of the institution. Dr. Charteris, the President of the Society, delivered an address, in which he dwelt on the effects that the Duke of Richmond's Medical Bill would have on the students of the Scotch extra-mural schools. After the address, he distributed honorary diplomas of the society to several gentlemen, and announced that Mr. G. W. Till had obtained the President's Prize for the best essay read during the session. The meeting terminated with the usual vote of thanks.

REMARKS ON MORBUS COXARIUS.*

By H. MACNAUGHTON JONES, M.D., F.R.C.S.I. & Edin.,
Professor of the Queen's College, Cork; Surgeon to the County and City of Cork
Hospital for Diseases of Women and Children, etc.

It is with the view of showing that this disease, as most British surgeons believe, has at times a strictly diathetic source, irrespectively of even the slightest injury, that I bring forward these cases; and as the hip-joint has been excised in three out of the four, and a portion of the femur in the fifth, I thought that the brief notice which I shall give of their history might elicit an useful discussion at this meeting, and an expression of opinion on the merits, indications, and contraindications of excision of the hip in desperate cases of this formidable affection. Three of the children were of the same family; they were brought up until the last few years in the country, and had never had any ailment nor any serious illness; the parents are both perfectly healthy, in fact robust. The children have all had, from the time I saw them, an anæmic sallowness of appearance; they are dark complexioned and pallid; there were five other children, and three of these have died, as stated by the parents, of various lung affections, since the removal of the children into the city, and one has recently had an attack of hæmoptysis.

CASE I.—Hannah C., aged 6, admitted January 2nd, 1877, had been unwell, suffering from morbus coxarius in the second stage of the disease. No history of injury of any kind; parents positive on this point. There was a considerable shortening of the limb (two inches). She was suffering also on admission from diarrhoea and vomiting, with violent periodical pain both in the stomach and hip-joint. She had outside one or two attacks of syncope, with some severe epigastric pain, when her friends thought she was dying; these recurred in the hospital. On admission, the child was put under chloroform, and the limb gently extended and kept so with weight and pulley. After a short stay in hospital, the parents took a panic after one of the attacks of syncope and removed her. She suffered such pain at home that she was brought again to the hospital on April 19th, 1877, with symptoms of acute inflammation about the joint and threatening of abscess. This rapidly formed, and the abscess was opened antiseptically shortly afterwards, and a quantity of purulent matter evacuated. The leg was kept from this time under extension, and antiseptic dressings used. Very soon another abscess formed under Poupart's ligament beneath the pubes, which was treated in the same manner as the first. From this time, the child passed through the usual painful course of suppurating hip-joint, with discharges, pain, hectic, occasional diarrhoea, wasting, etc. On September 23rd, 1877, I determined to excise the head of the bone and remove any of the diseased portion. Accordingly I did so, finding the head of the femur completely destroyed, and the shaft softened to about two inches below the trochanter. I gouged away a portion of the acetabulum. The entire operation was performed antiseptically, and the subsequent dressings for some months were antiseptically applied. I did not expect much from this operation, and my fears were confirmed by the subsequent complications, which made the nursing and care of the case extremely difficult. Large pale flabby granulations formed over the wound of an unhealthy strumous nature; the abdomen became tumid and tympanitic; there were periodical attacks of diarrhoea and hectic; and, to make matters worse, the child got an attack of strumous cornitis and an eczematous eruption over the entire face. However, for the past few months, the wound, with care and by alternative disinfectant dressings, such as carbolic oil, salicylic acid, etc., has put on a healthy appearance, and is now healing. The child is looking well, the appetite is restored, and the limb is kept in a box splint, in which it has lain from the first, after the plaster-of-Paris dressings with extension by weight. Certainly the present condition of the little patient exceeds my utmost expectations.†

CASE II.—Mike C., aged 4, brother of this last patient, was admitted on January 12th, 1877; had been ailing for twelve months; now in the third stage of morbus coxarius, *râles* all over right lung, and diarrhoea, with perspirations and hectic. He remained in hospital until the 19th of May, under extension with weight and pulley; he was then so much improved that he was sent for change to the convalescent home. He did not come back to hospital (having been taken from the convalescent home to his own house) until September 1st, when he was admitted again with an abscess on the point of bursting over the trochanter. This was aspirated, and the cavity washed out antiseptically. But from this time he became worse, diarrhoea set in, and he suffered great pain. On December 19th, I operated as in the last case, and the subsequent treatment was the same. For a time, he appeared to do remarkably

* Concluded from page 424.

† This patient is still doing well, though there are periodical attacks of diarrhoea; the site of the wound is looking healthier. She is kept in bed, and slight extension maintained.