tuberculous or scrofulous. Both these terms have thus frequently, and with but little consideration, been used synonymously. A very slight acquaintance, however, with the true pathological changes that ensue in really tuberculous glands, and in those which are not affected with tubercle, though occurring in highly scrofulous subjects, will serve to show that the expressions tuberculous and scrofulous are not, strictly speaking, convertible terms. The term scrofulous may be applied to disease of a gland in which tubercle plays the chief part, but the word tuberculous cannot with the same propriety be used to denote the nature and characters of every so-called scrofulous gland which, although appearing in what is termed a tuberculous subject, is in no way dependent for its morbid alteration on true tuberculous deposition. It is exceedingly difficult clearly to define the use and correct meaning of expressions which have inadvertently, though unfortunately, crept into general requisition; but the judicious practitioner will at once see that a broad practical distinction is often necessary and very advantageous.

There is no manipulative distinction, so far as I am aware, whereby the earlier stages of tuberculous mischief may be distinguished from other forms of glandular enlargement. It has already been shown that glands implicated with tubercle either slowly or rapidly pass through various destructive changes, and that such alterations are accompanied with symptoms more or less dissimilar to those in which tuberculous invasion plays no part. When softening and suppuration obtain, and certain indications are manifested, which are usually associated with tuberculous diseases, then the doubt which remains is greatly diminished, and little, if any further difficulty prevents the correct recognition of the nature of the affection. Added to the local mischief, a more or less general constitutional disturbance exists, which oftentimes enables the surgeon at once to distinguish the true nature of the enlargement.

Although tuberculous glands in an incipient state are apt to be confounded with simple hypertrophies and *engorgements*, still there are certain other morbid conditions for which they may be mistaken. Cystic tumours, especially about the lower jaw; medullary affections of the absorbent glands; fatty and fibrous tumours, and chronic abscesses, are among the abnormal formations which occasionally embarrass the surgeon in the ready recognition of tuberculous glands. I have frequently known cysts containing atheromatous, steatomatous, and other secretions, mistaken for tuberculous glands; and so close is the similarity exhibited, both by fibrous and other tumours, that great care is sometimes needful in forming a correct diagnosis. Chronic abscesses situated in the region of the neck not uncommonly assume appearances nearly identical with those exhibited by absorbent glands in an occult stage of tuberculous disease. I have known even the most intelligent surgeons proceed to the removal of tumours supposed to be glandular, but which on the first application of the knife have proved to be of a totally different character. Not uncommonly, the only glands which are found tuberculous are those situated in close relation to the under and front surface of the lower jaw; and within the past few days, I have seen a surgeon proceed to the removal of a single tuberculous gland, situated in the centre line of the neck, under the impression that it was a fatty tumour. Such a mistake may, however, oftentimes be avoided by noticing whether neighbouring glands are similarly affected, or whether unmistakable mischief of pre-existing disease—as old scars and deformities—can be detected. A very marked similarity is sometimes seen to exist between tuberculous and medullary mischief in absorbent glands.

Some years ago, in Mr. Partridge's wards in King's College Hospital, I saw a scrofulous but otherwise healthy, though pale-looking man, with a cluster of enlarged cervical glands greatly resembling tuberculous enlargements. The diagnosis was, however, uncertain, and continued so for some time, but eventually unequivocal symptoms of malignancy announced the terrible nature of the complaint.

A few days since, I was requested when at Margate to see, in consultation with my brother Dr. W. Price, an elderly female, who had a tumour of about the size of a walnut, situated over the sternal portion of the clavicle. Ulceration had commenced, and had softened the growth. It presented very closely the aspect of malignancy; but on examining her neck, I discovered various scars which marked the previous existence of tuberculous mischief in many of the absorbent glands.

In arriving at any diagnostic distinction in instances in which dubious grounds exist, it will be advisable always to recollect that there are generally certain peculiarities which particularly distinguish tuberculous invasion of lymphatic glands

from all other conditions; and, although they may not be constantly present and prominent, still they are frequently so.

I allude particularly to the special diatheses in which glandular tuberculosis is apt to manifest itself, the sympathy of other and still more important organs, and to the wholesale way in which, if I may be allowed the expression, the diseased action invades the glandular arrangement of particular regions. And this brings me to make a few observations on a point which has not, as yet, in these pages, obtained any special consideration.

With the older authors, the maladies of syphilis and scrofula were supposed to bear a very near relationship, the latter disease being considered but a modified condition of the former. Indeed, they were often looked upon as one and the same affection, and like remedies were used for their treatment. The erroneous conclusions of those who held this doctrine have been fully exposed by modern research and experience; and, although hereditary or acquired syphilis may exert a more or less direct influence on the acquisition, or at least on the development, of scrofula, still it is now generally admitted that a very imperfect resemblance exists between them. The similitude which obtains between lymphatic glands affected by these two diseases is, however, the only point of immediate importance to the subject under consideration. I have myself never met with an instance of truly tuberculous lymphatic glandular disease which has, in any decided manner, resembled syphilitic enlargement; although the venereal poison may occasion such disturbance in one or more parts of the absorbent system as to give rise to doubt as to the exact nature of the mischief.

When considering the treatment of tuberculous glands, it will be mentioned how necessary it is sometimes to inquire if any marked syphilitic symptoms complicate those of scrofula, so that they both may be combated with advantage.

[To be continued.]

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By AUGUSTIN PRICHARD, Esq., Surgeon, Clifton, Bristol.

I.—OPERATIONS ON THE FACE, TONGUE, PALATE, NECK, AND CHEST.

[Continued from p. 776.]

Cancer of the Lip. The number of cases of cancer of lip was nine. In all, the V-shaped incision, more or less modified according to particular circumstances, was made with a scalpel, and the German-silver pins were used. A very short account of each is all that will be requisite.

CASE XII. G. J., aged 26, a weak subject, much accustomed to smoke, had a large ulcerating projection on the lower lip near the left angle of the mouth for six months before his admission; and it was at that time becoming fetid. The disease was removed freely in the usual way. On the fourth day I removed the lower of the two pins, and on the fifth day the upper one. The small separate point of suture which I had inserted in the red part of the lip sloughed out and was lost. The wound was healed, and he went out on the sixth day after the operation, with an excellent lip, but with some swelling of the glands of the neck on the same side as the disease of the lip, and this had existed on his admission. I never saw him again.

CASE XIII. S. B., aged 56, admitted with cancerous tumour of the lower lip, of eight months standing. It was distinct from the healthy part of the lip, and in an ulcerated state.

I removed the disease, and inserted three pins. On the third day I removed two lower pins, and on the fifth the upper, the string of which had caused some slight sore on the lip from pressure. The wound had healed entirely, and he went out in a few days.

CASE XIV. C. D., aged 64, apparently healthy, had suffered from cancer of the lip for some years before I saw him, and the disease had attained a considerable size, that is, from one angle of the mouth to the other there was a space of three inches and a half, and the width of the tumour alone was two inches and a half.

After removing the diseased portion, I was obliged to separate the lip freely from the jaw by cutting through the mucous membrane on each side where it passes from the lip

to the bone, otherwise the great gap could not be brought together. It was, however, done satisfactorily by means of three pins and a silken suture through the red part of the lip. The whole was supported by adhesion and bandage, for although it fitted remarkably well, it was very tense.

On the third day I removed the lowest pin and the silk; on the fourth, the middle pin; and on the fifth day the upper one. In this case also the thread cut a little into the lip, but the union was complete. He went home after about a fortnight quite well.

CASE XV. F. B., aged 54. The tumour was as large as a "cob" nut, and had been growing for two months. I removed it in the usual way, and he went out cured in a few days.

CASE XVI. W. P., aged about 50, had suffered from cancer of the lip for some years, but he had an enlargement of the sublingual glands previous to the disease in the lip. The ulceration was on the right side, and extended beyond the angle of the mouth and half-way along the lip. I removed the disease by cutting out a triangular portion, with the apex below, and inclining inwards towards the median line, making the outer cut a little curved, so that when the parts were brought into proper position, the two lines of incision were exactly of the same length. Three pins, and two points of ordinary suture, were used to keep the parts together. He lost a good deal of blood, and was very faint.

On the fourth day I took out all the pins but one, and on the fifth day the last one, and the union was perfect. He was dismissed cured on the eighth day after the operation.

CASE XVII. R. S. had suffered from cancer of the lip, occupying the middle third of it, for many months. After repeated trials by caustic, I removed the disease, the base of the V-shaped portion being an inch long, and brought it together by four pins. On the third day I removed two, and on the fourth the remaining two pins, and found it soundly healed. When he went out a few days afterwards, there was a very slight superficial sore upon the lip at the top of the wound.

This patient has returned with swelling and threatening supuration underneath the chin, the scar made by the operation remaining perfectly sound.

CASE XVIII. P. C., aged 56, had the disease six months before he underwent an operation. The disease was situated at the left angle of the mouth, and occupied nearly half the lower lip. I operated by the oblique incision (as in Case XVI), and after separating the lip from the jaw, brought the parts in place by three pins and adhesive plaster.

On the second day I removed the middle pin, on the third day the lower, and on the fourth day the upper one, and found all perfectly healed. He went out cured on the sixth day.

The two remaining cases were not so satisfactory in their results.

CASE XIX. D. L., aged about 65, was admitted with a thickened and excavated ulcer of the lower lip, extending beyond the right angle of the mouth to the upper lip, and occupying the greater part of the lower lip. In this case I operated, and removed a slice along the lower lip below the diseased portion, continuing the incision into the cheek obliquely downwards and backwards; a similar cut on the upper lip joined the first at an angle, and thus the whole of the cancerous part was removed. I brought the edges tolerably well together with ordinary sutures.

The greater part healed well; but after the removal of the sutures, it was found that a portion was not united, and he was unable to retain the saliva in his mouth. He went home relieved but not cured.

CASE XX. A. B., aged 60, had suffered from a disease of the lip for nine weeks. It had grown very rapidly and was much ulcerated, and occupied the middle three-fourths of the lip. I removed the greater part of the lip, forming a broad triangle, reaching by its apex down to the bottom of the chin. It was necessary to separate the soft parts from the bone for some distance on either side, and to use three pins and two ordinary sutures to keep the parts in complete contact. There was free bleeding. On the second day I removed the upper small suture, on the third the lower suture and two pins, and on the fourth the last pin; and a little pus oozed out on the removal of the pins. The union by the first intention was perfect; but in rather less than a month, a hard tubercle returned in the scar, and the disease rapidly reappeared, the patient declining to submit to any further operation.

REMARKS. Epithelial cancer, wherever it occurs, is admitted to be the form in which this dreadful disease is curable if it ever is so; and I believe that of all the modes of cure the knife

is by far preferable. One of the patients, upon whose lip caustics had once or twice been applied in vain, immediately after I had cut out the diseased portion and finished the operation, volunteered the remark that the pain of the knife and pins did not equal one application of the caustic.

In the case (No. xx) where the disease returned within the month, the carcinomatous growth had been unusually rapid in its previous development, having invaded three-fourths of the lip in nine weeks, yet I have always feared that although I cut away nearly all the poor fellow's lip, some seeds of the disease must have remained behind. It is very seldom that I have seen the recurrence of the disorder in the same part. A patient was admitted under one of my colleagues not long ago, suffering from extensive unhealthy ulceration and induration in the submaxillary region with threatened sloughing of the gland, and its nature was not easily determined at first, until casually a scar was seen on the lip and chin, and upon questioning him, it appeared that many years before (ten or twelve, according to the best of my recollection) a cancer of the lip had been removed, and the complaint had remained dormant in his system all that time.

I have also under treatment at the present time an old man, who has had an indurated and ulcerated surface near the inner canthus of the left eye, which is gradually yielding to the nitrate of mercury ointment and an occasional touch of the nitrate of silver. Seven years ago, he underwent a successful operation for the cure of a cancer of the lip on the same side, but the epithelial disease of the cheek has existed twenty years.

These cases afford an excellent illustration of the efficiency of the German-silver pins of large size; for they are very sharp and round, they produce no irritation, and are removed by a rotatory motion without any pain, leaving the threads *in situ*, as an additional protection; and, as will be seen by anyone who may take the trouble of reading the following cases, I always use them, wherever they are admissible, even in amputations.

Cancer of the Tongue. CASE XXI. M. D., aged 50, had a tumour on the left side of the tongue for nine months; it was round and hard, with definite edges, feeling like an extraneous substance in the tissue of the organ. After trying the effect of mercury upon it, without avail, I excised it, by laying hold of it with a double-hooked forceps (*vulsellum*), and passing a bistoury through the tongue, and removing it in a triangular portion by two cuts. Two vessels bled freely, but stopped spontaneously, and the wound was brought together by three sutures, which were removed on the third day, when the wound was found to be healed. The microscopic examination of the disease showed epithelium, cancer cells, blood corpuscles and muscular fibre, with numerous regular round cells, with granular contents and larger than blood corpuscles (probably developed and escaped nuclei of the cancer cells).

I never saw this patient after he left the Infirmary.

CASE XXII. R. J., aged 59, was admitted with a hard tumour of the tongue, ulcerated, and with prominent edges, which had existed for some months.

I passed a large curved needle through the tongue, and tied a string tightly in front and behind the tumour. He suffered excessive pain. About the seventh day, under the use of a chlorinated lotion, the dead part separated and healed readily, so that he was reported "cured" when he left the Infirmary a month after the operation. His general health was improved. The "cure", however, was but of short duration. Within two months, he returned with a tumour as before, which I treated as before, tying it with strong fine whipcord, and notching the tongue in front and behind to ensure perfect strangulation and isolation of the tumour. It separated and partially healed up, and he left with a very suspicious ulcerated place in the tongue.

After this, I heard that the disease returned rapidly, and that he died the death of bodily suffering which is the lot of patients suffering from this frightful malady.

CASE XXIII. J. F., aged 37, was under my care at first for about five weeks, when I tried the effect of mercury, iodine, chlorate of potash, caustics (chloride of zinc, etc.), cod-liver oil, and all kinds of remedies, but in vain. He was suffering from a hard and thickened and ulcerating sore, extending from near the tip of the tongue about an inch and a half backwards. This I cut away deeply and freely, and the bleeding was considerable, requiring two ligatures. I then lessened the size of the gap as much as I could by means of two sutures, which came out in the course of a few days, and he went out with the wound entirely healed. This man was convinced throughout that he had a malignant disease, although the appearance was

not so characteristic as it sometimes is, and at first I had doubts upon the subject. In a short time the disease returned, and grew rapidly, and proved fatal.

REMARKS. Of these three cases, the disease returned very quickly in two that were in an ulcerated state when the operation was performed; the other was, at any rate for the time, and it may be, altogether, cured. It is obvious that the earlier an operation is performed, the better. Besides these three instances of cancer of the tongue, I had a patient, aged nearly 70, who had a deep excavated sore, with hard edges and excessively fetid discharge, far back on the dorsum of the tongue. As operation was out of the question, I treated him by drawing the stumps of some teeth that appeared to irritate the sides of the sore, by tonics, stimulants, cod-liver oil, and the application of a twenty and afterwards thirty grain solution of the nitrate of silver freely to the surface. The hardness disappeared, and the wound healed. He went home, and remained well for a month or two, when the disease returned, and was treated again in the same way, with a like result. Some time afterwards, I heard that it had recurred a third time, and was likely to prove fatal; a result which has doubtless taken place long ago.

Staphylophary. The cases of this operation which I have to narrate would appear, in a strictly scientific classification, among the operations for the removal of congenital deformities, but being few in number, it is as well to introduce them here.

CASE XXIV. E. G., aged 24, had a scar on his lip, the remains of an old operation for hare-lip, and he had a fissure extending from just behind the alveolar process backwards through the uvula.

After he had taken, for the support of his system and the upholding of his courage, a profuse meal of beefsteak and beer, I operated by paring the edges, and bringing the soft palate together by two silken sutures. There was very little tension, and the union was complete as far as the sides were in contact, and even afterwards the granulations still further lessened the aperture that remained. The stitches were taken out on the fourth day.

CASE XXV. J. S., aged 26, with an awkward nostril, and a scar from a hare-lip operation, had apparently been a case of double hare-lip with prominent bone, requiring removal, and was operated on by a former surgeon to the Bristol Royal Infirmary, in the patient's earliest months. A fissure of the palate extended from the alveolar processes backwards.

I removed the edges of the fissure, and brought a considerable length of it into contact by means of four stitches: the tension not having been very great. On the third day I removed the lowest stitch which was really in the uvula, on the fourth the two next, and on the fifth the last. The parts had healed satisfactorily.

CASE XXVI. E. G., aged 21, with cleft palate, but no trace of hare-lip. I pared the edges in the usual way (that is, by holding each extremity of the uvula in turn by a forceps, whilst I stripped off the edges of the fissure with one of the straight little knives generally kept in the case of tenotomy instruments), and introduced two sutures by means of a common small curved needle held in a pair of forceps. The parts came well together, and she was very steady. The next day the throat became extremely inflamed, but the parts were well in apposition. On the third, the throat looked sloughy and was fetid, and I removed a stitch. On the fifth day I removed the other stitch, and found that the sides of the fissure held together but loosely, and an aperture appeared on the anterior part. The adherent portion grew narrower, so that on the eighth day I was in great uncertainty as to whether it would all break open or not. I had given her a little wine, and brushed the parts with a solution of nitrate of silver, and the wound healed; granulations sprang up, and the opening anteriorly lessened. I afterwards touched it with the galvanic cautery, and it became about the size of a shot. Some time afterwards, I touched the aperture very lightly with a piece of caustic potash, hoping to make it granulate and close, but this increased its size. I then pared the edges of this round hole and brought them together, to no purpose, for it broke open again, and now she has an aperture, of the size of a split pea, about half way between the alveolar processes and the uvula.

CASE XXVII. A. H., aged 41, cleft palate and hare-lip scar. The fissure extended about half way through the hard palate.

The operation was as usual, and four sutures were introduced, the anterior one being very tense, and therefore I scored the palate with two cuts through the mucous membrane, parallel to the middle line. The mucous membrane forming

the posterior pillar of the fauces was also excessively tense. The case failed completely, and in three or four days split open throughout.

This patient was very courageous and anxious to be cured, and therefore in six months time I operated again in the same way, with the addition of dividing tolerably freely the posterior pillar of the fauces; the result was the same; on the fourth day it had all burst open.

These two operations were performed before the metallic sutures came into general use, and it is not impossible that they would have succeeded.

REMARKS. My experience of this operation, extending only over these cases, and one or two others that have been under the care of one of my colleagues, does not entitle me to say much on the subject; at the same time, considering the appearance which these throats have presented, when sewn up and when healed, considering also the loose way in which the fibres of the palato-pharyngeus are held together between the folds of membrane, and the fact that one or two fibres of a small muscle (as seen in the operation for strabismus) will produce a very distinct and marked effect, I do not believe in the division of the palato-pharyngei as a necessary step in this operation. My success was three out of four; and in the fourth, it obviously was not muscular contraction, but absolute want of sufficient mucous membrane to fill the gap that caused the failure.

Epulis. CASE XXVIII. M. P., aged 17, admitted with a small firm growth on the gum opposite and against the right lateral incision of the lower jaw. Caustics had been applied, and partial removal had been performed.

I removed it by incision, and afterwards cut a notch out of the alveolar process with the bone nippers. She went out cured in four days.

Nasal Polypus. CASE XXIX. A. B., aged 12, with polypus of the right nostril of a month's standing, not quite closing the cavity. I removed it entire with the forceps, with scarcely any hæmorrhage, and she was cured.

CASE XXX. A. S., aged 57, had not breathed through his left nostril for ten years. The polypus was visible in front and at the back of the pharynx. I removed it piecemeal with the forceps, until he could breathe freely on this side. The hæmorrhage was considerable, but ceased on the application of cold.

CASE XXXI. C. D., aged 30, had polypus in each nostril for many years; the right being almost obstructed, the left completely so. At the first sitting I removed the growth from the left side, and a small entire polypus from the right, but as it was not quite free the next day, I operated again and freed it completely.

CASE XXXII. A. H., aged 50, with polypus of each nostril. It was removed from the left, leaving the cavity free, and he was so satisfied, that he declined any further proceeding. He has remained cured.

REMARKS. This operation, which is rather rough in its nature, and disagreeable to the patient, surgeon, and lookers on, requires a certain amount of dexterity, and there is as much difference perceptible in the skilful or unskilful performance of it, as in other more important proceedings. A forceps, rough in its blades, and meeting at the points but not elsewhere, is the instrument, which must be used lightly and very freely, with due remembrance of the surfaces along which it may safely glide. After the removal of a polypus or a portion of it, I have never had any difficulty in introducing my little finger completely into the nostril to feel for the root of the growth.

Many of my cases were among the out-patients, and escaped the record from which these were taken. The second (xxx) was one of those growths extending into the pharynx, where the ligature is practicable and admissible. It was in cases such as this that I have seen Professor Dieffenbach, when I attended his surgical clinique at Berlin in 1841, slit up the lip and nostril close to the median line, turn back the side of the nose, lip and cheek, and with a pair of sharp curved scissors snip away the growth from its base, and after removing it entire, bring the parts together with pins so thoroughly, that in a few days it was difficult to see the line of section. This mode of operating has, some years ago, been brought forward as a novelty in London. I believe the cases to be extremely rare in which such a dissection would be justifiable.

The microscopic examination of these growths shows epithelium of varied form.

[To be continued.]