the attempt at extraction, and the old stumps having been left in the sockets. The bones, she said, had been broken on those occasions, and the crops of little boils frequently commenced by the appearance of a common gum-boil. I advised removal of the decayed parts; but she put the matter off on account of former misbaps. The small boils were frequently removed by the medicine, and as frequently reappeared; but after the proper removal of the old stumps, etc., she ceased to have any more. This case was certainly merely annoying, and far from dangerous; yet I think it illustrates the same series of events as the other more serious ones; viz., absorption of decayed matter, its eruption on the surface in the form of little boils, and the alterative effects of the antiseptic treatment while it was continued.

Case vii. Mr. J. H., aged 62, came to me on 17th August, 1858. He had been excessively weak and low for several months past, and for two months had had a succession of boils, which he had been contented to have poulticed, while he took cream of tartar and sulphur inwardly every day. At length, a very large boil, or carbuncle, appeared on the nape of the neck, which compelled his more serious attention. His pulse was small, and the heart's action fluttering, weak, and intermittent. I advised immediate opening, which was effected by a good crucial incision, in the course of that day or the next, by my friend Mr. Downes of Handsworth; and he took quinine, compound tincture of cinchona, colchicum, morphia, and the acids.

Sept. 2. He felt easier and stronger, though the carbuncle was tender, and exhibited the appearance of a very deep foul cavity, containing the broken up core and bloody sanies. The other smaller boils had shrunk, and he had eaten and slept pretty well. No fresh outbreak had occurred.

He was seen on the 6th, the 13th, and 22nd of September, on which last day all the smaller boils had disappeared, and the large gap in the nape of the neck was almost closed. He reported himself strong, and fit to walk for many miles without fatigue, of which fact the heart's action gave corroborative evidence. He took for some time thereafter pills of quinine and steel, and had no relapse. I could not here distinctly trace any prior putrid infection; but it was a case in which I think the mere opening, and poulticing, and giving bland diet, would not likely have served the purpose, as the constitutional depression was so marked, and the patient advanced in years.

Case viii. A lady in Shropshire consulted me some time ago regarding the obstinate recurrence of boils over her abdomen, back and arms, and also in the perinæum. She was about 47 years of age; long married, but without any children. She had always suffered from painful menstruation; but of late the discharges had been more protracted than usual, and at the latter end had exhibited signs of putridity. The os uteri was found to be exceedingly small, and I concluded that, at the catamenial periods, there was a retention of some thickened fluid towards the end of the effort, which fluid became putrid, and was partly absorbed into the system. Under this conviction, I advised dilatation of the canal of the cervix, and prescribed, not only quinine, but a mixture of the tinctures of steel, lytta and ergot, with morphia and hydrochloric acid, to be taken twice a day ordinarily, and three times a day at the catamenial periods. Under this treatment the boils ceased to appear; while the menstrual flux came to last only four days, without pain, and without putridity. Here I felt satisfied that the sequence of events afforded proof of the truth of the general diagnosis; namely, the presence of putrid matters absorbed into the blood, giving rise to a series of boils, which vanished under the eliminative and corrective line of treatment, adopted in accordance with the theory of septic poisoning.

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Concluded from page* 301.]

V. It not unfrequently happens, when ulceration follows suppuration of tubercular glands, and heals without the direct attention of the surgeon, that the implicated integument remains disfigured by induration, unseemly scars, and uneven cicatrices. Under such circumstances, the use of certain measures, to be presently described, will oftentimes lead to a favourable solution of the existing disfigurement.

a. Lotions. When induration of the integument and adjacent cellular tissue results from the healing of tubercular ulcerations, it may frequently be removed by absorption, especially when it is of recent origin, and correct therapeutical means are employed. Without doubt solutions of various salts of iodine will be found among the most valuable adjuncts which the surgeon has at his command. Mr. Erichsen, in his *Science and Art of Surgery* (3rd edit., p. 465), strongly recommends lotions of iodide of potassium and carbonate of potass: drachm of each of the salts, with an ounce of spirits of wine and eleven ounces of water, makes, he says, an excellent application, which should be kept constantly applied to the implicated parts by means of linen or lint covered with oil-silk.

I am in the habit of substituting iodide of ammonium for iodide of potassium, as I have reason to believe that it will be found more beneficial. Sir Astley Cooper placed great faith in a solution of chloride of ammonium, and other surgeons of large experience have written in favour of the use of simple alkaline solutions. What-ever liquid applications are employed, it is all important that sufficient time should be given for a trial of their efficacy; for it oftentimes happens that a satisfactory result is only obtained after their most persistent use.

b. Unguents. When the application of lotions has failed to produce the desired effect, it will be advisable to have recourse to some more definite measures to procure absorption and removal of the indurated condition. I have experienced considerable advantage from simple frictions, especially when no abnormal tenderness has been exhibited by the implicated parts. But still greater good will oftentimes be derived from the additional use of certain ointments and oils.

When the aplastic deposits are of long standing, the use of an ointment composed of iodide of ammonium, such as already described, will often lead to gradual softening and absorption of the hardened surface to which it is applied. The great advantage of this application is, that it can be used with freedom without imparting to the skin the peculiar colour which the local employment of pure iodine produces, and whilst equally effective, or nearly so, is, in many ways, less objectionable to the patient.

When it is deemed necessary to make use of mercurial preparations, the *unguentum hydrargyri* may be selected; or, under certain circumstances, iodine and mercury may be combined in one or other of the forms previously considered. I have elsewhere spoken favourably of the use of oils, when assiduously rubbed into the integument covering an indurated gland; and I can also recommend their employment in all false hypertrophies of the skin and cellular tissue. When containing iodine, mercury, or certain stimulating substances, such as am-

monia, camphor, chloroform, etc., they will be found doubly advantageous. Great care and discrimination are, however, always needed before advising friction either with ointments or oils. I have known too vigorous and oft repeated applications of these substances fraught with the greatest mischief; while it not uncommonly occurs that even a limited use of them produces an undue amount of irritation, which leads to ulceration and suppuration, and, in fact, to a reopening of the original sore. When such is the case, I have found occasional paintings with glycerine, in which is dissolved iodide of potassium or of ammonium, of great benefit.

c. Caustics. As already seen, an unseemly scar is one of the most frequent results which follow an indifferently treated attack of suppurative destruction of the external lymphatic glands. When a disfigurement of this nature causes not only personal but physical annoyance, the opinion of the surgeon will oftentimes be solicited as to the best method of obtaining its removal. Scrofulous scars (so called) generally present certain characteristics. They vary in colour from a normal to a bluish-purple tint, have a raised and unhealthy appearance, and are sparingly covered with cuticle. Under certain conditions, they prove irritable and painful, and are always more or less liable, especially when the system is impoverished, to assume diseased changes by reason of their low standard of organisation.

When a scar resulting from the healing of a tuberculous ulcer, or one in connexion with a gland which has been involved with tubercle, is of such a kind as to give rise to disfigurement, and becomes the seat of irritation and pain, its destruction may be deemed advisable, so that nature, immediately assisted by art, may more efficiently repair such structures as have through disease lost their original integrity. For this purpose, the use of various caustics has from time to time been recommended. Among those most generally selected, the following may be mentioned:—Chloride of zinc, potassa fusa, nitrate of silver, and the strong mineral acids. I am most disposed towards the employment of potassa fusa, and seldom select any other caustic, as I have found it, when judiciously employed, in every way the most satisfactory. One or two applications usually suffice; and, if care be taken, the new tissue which results will bear a very close resemblance to healthy skin, although to the accustomed eye it will always, or generally so, be found to differ. It usually possesses a more shining and glistening hue, and presents a stretched appearance. Wandering over its surface will be detected irregular, tortuous, red, linear vessels; and here and there, especially if the tendency to scrofulous action be prominently marked, a proneness to ulceration. Although the patient may be well pleased to recover from a severe attack of glandular tuberculosis with no further disfigurement than one or more patches of new tissue, which, if not absolutely similar, bear a close resemblance to the normal cutaneous surface, still the surgeon is bound to use every endeavour to forward the most advantageous form of cicatrisation and reparation.

It is only of late years that a correct acquaintance with the nature and nutrition of scars and cicatrices has sufficiently impressed practitioners with the importance of regulating and avoiding their unnecessary formation. There is no doubt whatever that the growth of cicatrices is accomplished by assimilative processes identical with those which lead to the development and increase of healthy tissues. Consequently, it is expedient that all available means should be used to keep them as limited as possible; for although, in the early years of childhood, a scar resulting from tuberculous destruction of a lymphatic gland may be nearly imperceptible, still, at a more advanced period of life, it will be found to have relatively increased with the other tissues of the body; or, to use the words of Mr. Paget, "the scar of the child, when once completely formed, commonly grows as the body does, at the same rate and according to the same general rule; so that a scar which the child might have said was as long as his own forefinger, will still be as long as his forefinger when he grows to be a man."* (*Op. cit.*, vol. i, p. 49.)

Bearing these facts in mind, I make it a point never to resort to the use of caustics for the destruction of scars and cicatrices, unless I can be tolerably certain that improvement of an appreciable kind will result. In general, the pure caustic potassa, in stick, although immediate and sometimes severe in its effects, will be found the most advantageous form; for, with care, the diseased tissues can with nicety be destroyed without in any way endangering those of a more healthy nature. When the cicatrices are numerous, and situated, as they usually are, on the neck, it is generally more convenient to destroy them by degrees; for, in this way, the surgeon will be better able to accomplish what always proves to be a delicate, and, indeed, sometimes no very satisfactory task. After the formation of an eschar, soothing applications will be found most grateful. In the course of a day or two, the destroyed portions will separate, and leave a healthy surface. If this surface be on a level with the surrounding skin, it will be easy to induce cicatrisation and a permanent improved condition. Should one application of the caustic prove insufficient, it may be repeated, but not without giving some slight pain. The practitioner will, however, probably encounter but little difficulty in the judicious destruction of such scars and cicatrices, which cause an amount of disfigurement unpleasant to the sufferer, and by no means creditable to surgery, provided due attention be paid to certain requirements which have been noticed in these pages.

d. The Knife. When the cicatrices which result from the healing of suppurative lymphatic glands are very extensive, and cause serious disfigurement, they may oftentimes be removed, or considerably lessened, by the judicious and skilful recourse to the knife. The peculiar puckered condition which these cicatrices assume has already been alluded to; but it remains to be noticed how position and various circumstances influence their formation. A cicatrix following destruction of one or more of the superficial cervical glands situated in the middle of the neck, assumes a permanent puckered and dimpled appearance, by reason of the skin being glued to the deeper structures; for it will frequently be found impossible to elevate the integument so implicated from the parts placed immediately beneath. When lymphatic glands situated near to bone are destroyed, and where there is a paucity of soft covering materials, the cicatrices resulting will be likewise found adherent, not only to the cellular sub-structure, but to the bone itself. It is most usual to observe this condition at the base and angle of the lower jaw, beneath the eye, on the forehead, and over the clavicle.

When cicatrices of this character disfigure these various parts, they may be treated by the knife in one or other of the following ways.

If the cicatrix be healthy, and its unsightliness be mainly dependent on its puckered and dimpled appearance which results from its adhesion with deeper tissues, it will oftentimes suffice to sever the bond of adhesion, and prevent, during the healing of the wound which has been made, a re-union of the divided parts.

An operation of this nature is slight, free from any great amount of pain, and oftentimes productive of much benefit.

* My friend and colleague, Mr. W. Adams, has lately called attention to the importance of regulating the formation of scars, etc., in some interesting remarks on the growths of cicatrices proceeding *pari passu* with the rest of the body. (*Pathological Transactions*, 1860.)

The details of the following case illustrate how such a proceeding may be accomplished. A girl, aged 15, who had suffered for many years from various forms of scrofulous disease, experienced considerable inconvenience from an unsightly cicatrix, situated on the upper part of the right cheek, over the junction of the malar with the superior maxillary bone. The principal deformity arose from its firm adhesion to the bone. The tissue forming the cicatrix was very thin, and there appeared to be little, if any, interposed structure between it and the bone, while the patient had a fat chubby face, so that the deep depression which thus resulted was rendered the more disfiguring. A thin bladed narrow knife (a tenotomy knife) was inserted at the distance of about a quarter of an inch from the outer margin of the cicatrix, and passed obliquely down to the point of adhesion, which was then freely divided, care being taken to keep the point of the knife close to the bone. When division had been satisfactorily accomplished, the opposing raw surfaces were separated by drawing the cicatrix away from its old position, and retaining it in its new one by means of sticking plaster. In this way, the two surfaces were allowed to heal without the possibility of their again becoming united. In four days time, the cicatrix was allowed to slip back into its former locality, when it was found that considerable improvement had resulted, although it was impossible, as it is in all similar cases, for the deformity to be quite removed, on account of the loss of cellular tissue, fat, etc., which had taken place.

I have resorted to a similar operation when the cicatrix has been situated beneath the margin of the lower jaw, and with even better results. The proceeding is, however, still more satisfactory when the band of adhesion is connected with soft parts only, as where the cicatrix is situated in the neck beside the sterno-mastoid muscle. When the cicatrices are more complicated, it is often expedient to resort to a somewhat more extensive use of the knife, and entirely remove the disfigured integuments. This may often be accomplished to the credit of the surgeon and satisfaction of the patient.

The operation consists in entirely removing the cicatrix, and uniting the lips of the wound in such a way that a mere linear scar results. The advantage of such an operation is at once evident, especially if the deformity to be removed be the only one situated in a part of the body usually exposed to observation.

I may quote the following case as illustrating the advantages to be derived from such a method of treatment. A young lady consulted me, in the autumn of 1859, on account of an ugly scar, about two and a half inches in length, situated on the right shoulder, in such a position that she was unable to wear a low dress. Under the influence of chloroform, it was removed, great care being taken perfectly to adjust the margins of healthy integument, so that a mere linear seam should result. This was accomplished by means of delicate wire sutures; admirable union ensued, and, in a week, she left London, well satisfied with the result obtained.

I could quote many instances in which a judicious application of the knife was followed with decided advantages, but the above case is sufficient to prove the fact.

For the adjustment of the lips of the wound, I am in the habit of using a fine metallic pin, with the figure-of-8 suture, such as is employed by continental surgeons, in preference to the sewing needle armed with either silk or wire.

It occasionally happens that the cicatrix resulting from suppuration of lymphatic glands is so extensive that neither of the above operations will prove of any service. It then becomes advisable to remove the cicatrix and transplant a portion of adjacent healthy skin—in fact, a true Tagliacotian operation is needed. It is fortunate, however, that such a severe measure is seldom required; although I have resorted to it in instances in which the lower eyelid has been extensively disfigured, and serious conjunctivitis, and other affections of the eye, have resulted from inability to close the eyelids.

When mere bridles of integument cause additional disfigurement to a cicatrix resulting from destruction of a gland, they may be removed by means of the scissors or knife, without causing any special pain or annoyance. Situated on the anterior surface of the arm are one or more lymphatic glands, which sometimes become greatly enlarged and suppurate. The destructive action not unfrequently involves the flexor muscles and tendons, and the consequence is, that a serious amount of contraction of the fingers ensues.

I have very lately seen, in the practice of my friend Mr. Fergusson, a case illustrating these various features. The patient, a young lady, had suffered from scrofulous suppuration of one or more of the lymphatic glands in front of the arm. Two or three of the fingers were considerably flexed, and could not be extended, by reason of the contraction which had ensued in the muscle supplying the tendon—superficial flexor of the fingers. Division of the contracted tendons was resorted to, and the patient regained an excellent use of the fingers.

Such is a brief notice of the advantages which may often be afforded by the surgeon in cases of disfigurement and deformity arising from tuberculous and simple destruction of the lymphatic glands; but while I have endeavoured to point them out more forcibly than, perhaps, other authors on scrofulous diseases have done, yet I cannot too urgently insist on the importance of due attention being paid, both by the patient and the practitioner, to the various destructive and reparative processes which ensue when the external lymphatic system is invaded with tubercle; believing that, in the treatment of this disease and its results, prevention is, on all occasions, better than cure.

POISONING BY ACONITUM NAPELLUS.

SYMPTOMS OF POISONING FROM A MINIMUM DOSE OF FLEMING'S TINCTURE OF ACONITE.

By Thomas Skinner, M.D., Obstetric Physician to the Liverpool Dispensaries.

Having perused, both with pleasure and with profit, Mr. Duckworth's excellent "Observations on the Physiological Action of Aconitina", in a late number of the Journal, and being aware that medical literature is not overburdened with correctly observed cases of poisoning by aconite, I beg to offer the following particulars of a case of the kind, with a few remarks.

In the summer of 1850, when a student of medicine of the second year, and ruralising in the fishing town of Musselburgh, near Edinburgh, I was asked to prescribe for a strong and healthy woman, about thirty years of age, who had long been a martyr to chronic and sub-acute rheumatism. She showed me prescriptions she had had dispensed at various dispensaries and apothecaries' shops; and, so far as I knew at the time, aconite was one of the few remedies she had not tried.

As I was anxious to initiate myself in the art of pharmacy, I determined to some extent to be my own druggist. I procured from Messrs. Duncan and Flockhart of Edinburgh some of Fleming's tincture of aconite, as also some guaiacum and sassafras woods and bruised liquorice-root. With these and some raisins, I made the following mixture:—

℞ Tr. aconiti ʒss; decocti guaiaci (E. P.) ℥xv,—

of which the patient was to take one tablespoonful every eight hours, and an extempore vapour bath every night before going to bed. This treatment was continued for three days, when the catamenia appeared, and it was stopped. The only unusual sensations then experienced by the patient were numbness and tingling of the tongue,