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ON TWO CASES OF LONG-STANDING DISLOCATION OF BOTH SHOULDERS TREATED BY OPERATION,

WITH

FURTHER OBSERVATIONS ON THE CYANIDE OF ZINC AND MERCURY.

Delivered before the Hunterian Society, November 27th, 1889.

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MR. PRESIDENT AND GENTLEMEN,—I once had the terrible misfortune of causing the death of a patient from rupture of the axillary artery in an attempt to reduce a dislocation of the shoulder. In January, 1873, a man, aged 58, presented himself at the Royal Infirmary of Edinburgh with the symptoms of an ordinary subcoracoid luxation, which he said had been caused by a fall five weeks and a half previously. I afterwards learned that eight weeks had really elapsed since the accident. Having no reason to doubt his word, I proceeded to make free but not at all violent movements, first with manipulation, and then with the pulleys. Not succeeding in these attempts, I decided to wait a day or two in the hope of a more favourable state from softening of the textures through irritation by the first trial. I had scarcely expressed this determination when my attention was directed to an enormous swelling below and behind the axilla, almost as big as a man's head, doubtless due to rapid extravasation of blood. No pulse was to be felt at that wrist, implying that the bleeding proceeded from the main vessel. I cut down at once in the axilla and turned out a mass of clots, and as nothing appeared wrong with the lower part of the vessel, except absence of pulsation, I divided both pectoral muscles up to the collar bone, so as to obtain access to the upper part of the axillary artery. I then discovered an orifice about one-sixth of an inch in diameter in the posterior part of the wall of the vessel in that region. Having tied the vessel above and below this orifice, I took off the head of the bone so as to enable me to place the humerus in its normal position, and left the patient, though considerably reduced, chiefly by the extravasation that had occurred before I operated, in hopes of a satisfactory result. He rallied for a while, but sank about three hours later. On *post-mortem* examination we found that the surface upon which the head of the bone had rested in its new situation simulated cartilage in smoothness and firmness, and was formed of a dense fibrous structure, strengthened with a considerable amount of osseous deposit in the form of spicula, proceeding chiefly, though not exclusively, from the coracoid process and the surgical neck of the humerus. A broad and strong fibro-osseous band, thus connecting the humerus with the coracoid process, had lain over the head of the bone, and at the same time was intimately connected throughout by condensed tissue with the sheath of the axillary artery which lay over it. Thus the vessel, instead of being surrounded by loose and yielding structure, as in the natural state, was attached through the

medium of the osteo-fibrous band to the coracoid process on the one hand and the neck of the humerus on the other; and when these were separated from one another by the attempts at reduction, the artery, as well as the band, was necessarily subjected to violent traction. Accordingly the band, strong as it was, was found to have been torn right across, and the rent in it was exactly opposite to the rupture in the artery. An atheromatous condition of the vessel served to explain still further the disaster.¹ The knowledge of the fact that a condition thus strongly predisposing the axillary artery to injury, when traction was made upon the humerus, might be developed within eight weeks of the occurrence of the luxation has ever since made me feel a great horror at attempts at reduction of long-standing subcoracoid dislocation. Accordingly in the cases which I have now to relate I determined to adopt what I hoped would prove a safer mode of procedure.

T. C., a robust labourer, aged 47, was engaged on April 17th, 1887, in felling trees; and having climbed up one, fell a distance of forty feet on his outstretched arms, producing subcoracoid luxation of both shoulders. The dislocations remained unreduced, and eight weeks after the accident he was sent to King's College Hospital for relief. On admission, both limbs presented the usual characters of subcoracoid dislocation. He was in a very helpless state, unable to dress himself, with the arms almost fixed in a slightly abducted position, and rotation very limited, particularly on the right side. He occasionally experienced numbness and venous congestion in the hands and arms. After considering for a few days what course it would be best to adopt, I proceeded on June 13th, nine weeks and a half after the accident, to operate on the left side in the following manner. Having made an incision from the coracoid process downwards and somewhat outwards, in the interval between the deltoid and the pectoralis major, I divided the tendon of the subscapularis muscle at its insertion, and then with a periosteum-detacher proceeded to separate the soft parts from the head of the bone and the inner part of its neck. This having been done so as to make sure that the vessels were entirely detached from the bone, I applied the pulleys in a manner which I need not describe in detail. As the pulleys dragged on the humerus, some fibrous bands were felt to be put on the stretch, and these were divided. The head of the bone still refusing to return to its normal position, the bone was more completely cleared, and the pulleys were again applied. This failing, the head of the bone was protruded through the wound as if for its resection, the external rotators being cut through at their insertions; after which the pulleys were again employed, the direction of the traction being altered from time to time by changing the position of the operating table. The pulleys were then suddenly relaxed by pulling on a slip knot arranged for the purpose, and at the same moment rotation outwards and adduction of the limb were performed. The head of the humerus was thus brought nearer to the glenoid cavity; it went still nearer on a second attempt of the same description, and at a third the head of the bone slipped into its normal place. I need not describe the patient's progress during the first few days further than to say that all went on favourably as regards the state of the wound and his general condition.

¹ For a full report of this case see *Edin. Med. Journal*, March, 1873.

Such being the case, on the following week I proceeded to operate on the other shoulder in a similar manner, except that, guided by our experience on the left side, I here at once protruded the head of the bone, dividing the attachments of all the rotators. In this instance, at the second attempt, the pulleys drew the bone into its proper position. The wound on this side, as on the other, remained without disturbance. On August 3rd the patient put on his coat and waistcoat unaided for the first time after the accident. The movements were continually improving. There was never any suppuration from within, either on the right side or on the left; but the passive motion which we maintained seemed to keep up a serous oozing from the interior, and it was nearly two months before the wound on the right side was perfectly cicatrised. On August 22nd, the day after healing was complete, the patient was discharged. On November 2nd, two months later, he came to the hospital for inspection. The arms could then be raised to a right angle with only slight movement of the scapula; and rotation was much improved. Some stiffness of the upper arms in the region of the biceps was observed, more marked on the right side than on the left; other movements were normal. Of his present condition you will be able to judge for yourselves, as he has kindly given us the opportunity of seeing him here this evening.

[The patient was now introduced.] You see that the shoulders have their natural rounded form. You are aware, of course, that the rounded form of the shoulder depends partly on the head of the bone being in its proper place, and partly on the deltoid having its due development. Here we have on each side a massive deltoid over the bone *in situ*.

[The patient stated that he could do any hard agricultural work as well as ever. He exhibited all the natural movements of the arms in their normal degree, except elevation of the limb, which he could not do far above the horizontal level. He said, however, that he still found an improvement in that respect going on, so that he could lift, for instance, a key from the top of a clock for the purpose of winding it up, which he could not do a few months ago.] This, gentlemen, was the first case of double dislocation of the shoulder that I happened to have seen, and, strangely enough, before this man left the hospital another example of the same thing made its appearance, due to a very different cause.

C. D., aged 23, was admitted into King's College Hospital on July 26th, 1887. Seven months before his admission the patient, who was an epileptic, dislocated both shoulders in an epileptic fit. He was sent to my colleague, Dr. Ferrier, with a view to the treatment of his epilepsy. Dr. Ferrier, however, found that there was not much that he could do for him, but thought it possible that I might be able to help him with regard to the state of the shoulders. Both humeri were found to have been dislocated in the subcoracoid position. There was considerable movement of the limbs, due to the fact that the scapulæ moved with extraordinary freedom along with the humeri. Nevertheless, he was in a pitiable condition; he could not dress himself, he could not put his hands to the gluteal region, and I need not say what a state of miserable dependence that fact implied. The muscles, especially those of rotation, were extremely atrophied. There were remarkable hollows above and below the spines of the scapulæ, so much so that some medical men who saw him doubted whether such extreme atrophy of the muscles could be explained by mere disuse. Encouraged by the case you have just seen, I determined to attempt to relieve him by operation. On July 29th I operated on the left shoulder in the same manner as on the former patient. The soft parts having been completely detached from the upper end of the humerus, the pulleys were applied, when the head of the bone returned into position at the first attempt. As regards the after-progress I need not go into details. Passive motion was begun thirteen

days after the operation, but we found in this case that there was a remarkable tendency to the occurrence of adhesions, making movements extremely difficult. We put him twice under chloroform, and moved the limb under the anæsthetic. The wound healed in six weeks without any suppuration except from the surface of the granulations; but the recovery of power was so extremely slow that for a while I feared no good would result from what we had done. In course of time, however, under the influence of passive movement and massage, together with galvanism, he improved so much that at length he besought me to operate upon the other side also. He could now dress himself, and he was no longer in the state of miserable dependence to which I have before referred. He could also lie upon that side, a thing which he could not do before the operation, and he wished that the other limb should be as favourably circumstanced.

But six months more had elapsed after the first operation, and the result of that procedure, although distinctly successful, had not hitherto been by any means brilliant, and I decided that in this case, instead of detaching the soft parts from the end of the humerus, and attempting reduction, I would merely cut down upon the head of the bone and remove it piecemeal by chisel and hammer without disturbance of the attachments of the external rotators. For a study of the skeleton with the humerus in the subcoracoid position had shown me that the removal of the articular portion, without interfering with the tuberosities, would allow the bone to drop back into relation with the glenoid cavity. This was done on January 27th, 1888, and the immediate result entirely answered my expectations. The bone went readily into its place, as I anticipated, and, the wound following the usual aseptic course, the recovery of movement was, in the first instance, much more rapid than it had been on the other side; and on March 22nd he was in a condition to leave the hospital. I afterwards had reason to regret that I had not followed the same course on the right side as on the left. On June 12th, 1888, he came to show himself. Both arms were continuing to improve in strength, but the left was now considerably stronger than the right, and its movements more perfect. He could put both hands behind his back; but with the left he could touch the angle of the other scapula, whereas with the right he could only reach as high as the top of the sacrum. He also complained of some pain in the thumb and elbow of the right side, that on which the head of the bone had been removed, while there was no uneasiness whatever on the left side, where the bone had been left intact. I should have been glad if this patient could have presented himself here this evening, but on inquiry I learn that he has gone to America. His brother writes as follows: "In the absence of my brother, I beg to acknowledge the receipt of your letter of the 22nd instant. He sailed for America in June last, where he is working on a farm, and I am thankful to say is enjoying good health. After he came home he had several fits, neither of which appears to have hurt his shoulders; but for some three months before he went, and since he has been abroad, they have not returned." That is a happy result, which I am afraid we can hardly attribute to our surgical procedures. "Before he went he had nearly gained full use of his arms and shoulders, the only difference being that he could not raise them in a horizontal position above the shoulder. By slightly bending his head and raising his hand from the elbow-joint, he could brush his hair and remove his hat, and he tells us he thinks they still get a little stronger; but from the fact that he is able to earn his living on the farm by very hard manual labour, the operation must be considered a grand success."

Now, gentlemen, it seems to me that the result of these two cases is encouraging to us to adopt a similar course in other cases of old subcoracoid dislocation of the shoulder. In the man who has presented himself before you the attachments of all the

rotators to the tuberosities of the humerus were divided, and yet you saw that they have completely re-formed; rotation is perfect, both external and internal. And in the other patient, although the dislocation had been of so much longer standing, the use of the previously wasted rotators had been completely restored. I would advise that when the surgeon feels in doubt as to whether it is prudent to make attempts at reduction, or when such attempts do not succeed, he should, in the first place, cut down upon the bone by the usual incision from the coracoid process downwards and a little outwards, and then with a curved periosteum-detacher freely separate the soft parts from the inner side of the upper end of the humerus. You will then be sure that no damage will be done to the axillary vessels in any manipulations that you may make. In many cases you will doubtless succeed by this means; but if this fails, then these instances show that you may proceed to turn out the head of the bone, detaching the insertions of the rotator muscles; and then in all probability you will be able to effect reduction, and, after reduction, you will have a thoroughly useful limb. Should even this procedure fail, removal of the head of the bone remains open to us, with promise of a good, though inferior, result.

Mr. President, I have hitherto felt considerable hesitation in publishing cases in which the safety and success of an operation are essentially dependent upon strict antiseptic management; and my principal efforts for some years past have been directed to an endeavour to procure, if possible, greater simplicity and, at the same time, greater efficacy in our antiseptic methods. At a recent meeting of the Medical Society² I brought forward a kind of dressing which I believe will prove more satisfactory than any which has been hitherto employed. For the successful antiseptic treatment of a wound two essential points are of course necessary. In the first place we should proceed so as to leave nothing septic in the wound before we apply the dressing, and in the second place we should put on such a dressing as we can thoroughly trust to keep out septic mischief until that dressing shall be changed.

I had intended to bring before you this evening some points with regard to the former of these objects—the means by which the wound can be kept aseptic till the conclusion of the operation; but since the communication that I made to the Medical Society I have been led to make further investigations into some matters regarding the use of the materials I then described, which seemed to me of sufficient importance and interest to warrant me in taking this opportunity of bringing them before you. The material, I may remind you, is a sort of double salt, an amorphous powder, insoluble in water, composed of cyanide of mercury in combination with cyanide of zinc. It does not seem to be a true double cyanide, inasmuch as the proportion of the mercurial element is considerably less than that which should be in a true double salt; nevertheless the mercurial element, as I have found, is of essential importance to the full antiseptic efficacy of the material. It was necessary that this powder, if introduced into a gauze or other fabric, should be fixed so as to prevent it from dusting out, for it is highly irritating to the nostrils, and besides, if it dusted out, the dressing charged with it would lose more and more of its virtues. I described at the Medical Society a means by which this was prevented; how by the use of starch the powder might be fixed in any fabric which was charged with it. But I have long felt that it would be an exceedingly desirable thing if this material could in some way be coloured, because, being perfectly colourless, if a gauze is charged with it, we have to trust entirely to the manufacturer as to whether the antiseptic element is present in due proportion or is not. It would be very advantageous if it could be coloured so that we might see by the tint where the antiseptic substance was, and whether it was uniformly distributed or otherwise. Therefore, before publishing the note which I had promised as to the preparation of the substance, I made attempts to stain this material. I tried various forms of dye, and I found that some of the aniline dyes are precipitated by this zinc-mercuric cyanide, and some are not. For instance, magenta is not precipitated in the least, but methyl-aniline violet and gentian violet, which seems to be a mere variety of the same thing, these are precipitated, and an exceedingly small amount of the dye is sufficient to give adequate colour to the double cyanide. I proceeded to charge a piece of gauze with some of this dyed cyanide, to see how it would tint it, and when it was dry I was much surprised to find that the gauze charged with the tinted

cyanide did not dust in anything like the same degree as a gauze would have done which had received the untinted salt; so much so that a gauze charged with the tinted cyanide was very much on a par as to dusting with the gauze charged by means of starch.

Of course, if this were so, it would be a very satisfactory arrangement; we should dispense with the starch, and also with a quantity of sulphate of potash, which was used for purposes that I need not here refer to; we should greatly simplify the method of manufacture, and also, by getting rid of the starch, we should make our gauze softer, and more comfortable to the patient. It seems a remarkable thing that the dye should thus be able to fix the powder. Of course, we understand how the starch does it. The starch particles becoming attached to the particles of the cyanide, glue them, as it were, to the fibres of the fabric. But how can we explain this dye, in the minute quantity in which we use it, answering the same purpose? I have here some gentian violet dissolved in 50,000 parts of water, and you see the great colouring power that this dye possesses. If I take a piece of gauze and dip it into the solution up to a certain point, you will see the gauze coloured up to that point, but the part that is moistened above by capillary attraction is colourless, showing the avidity with which the fabric seizes the dye. The dye has a remarkable fondness for the fabric; at the same time it is attached to the cyanide, for it is precipitated by it. We can thus understand that the dye may act as a go-between, attaching the cyanide to the fabric by virtue of its affinity for the fabric on the one hand and for the particles of the cyanide on the other. The mode of attachment is altogether different from that by starch, but the thing is done nevertheless. It seems to me astonishing that the dye should have this power. The quantity of gentian violet used is exceedingly small. We take, say, 20 grains of the salt, and diffuse it in 16 ounces of a liquid containing only 1-50,000th part of the dye, draw a piece of the fabric through it, and so charge it with the requisite amount of cyanide. If now we consider what proportion the gentian violet bears to the cyanide which it fixes, we find that there is only about one grain of the dye to 140 grains of the salt. But more than that: the molecule, the atom of the dye, is an exceedingly complex and heavy one; so that if we consider how many there are in comparison with the atoms of the cyanide which it fixes, we find that there is only one molecule of the dye to nearly 600 molecules of the cyanide salt. It is simply wonderful that each molecule of the dye should have the power of fixing such a multitude of other molecules. It seems another instance of what I have ventured to call solid solution. It is not a chemical combination, it is not a combination of one atom with one atom, but it is an attachment of one molecule with a multitude of other molecules. I have often contemplated with amazement the familiar fact of the solution of a soluble salt in water. Put a bit of common salt into a tumbler of water, and, as everybody knows, it will be quite uniformly distributed in a second or two. This marvellous fact implies that every molecule of the chloride of sodium has an area of a multitude of molecules of water in relation to it. If there were not the arrangement of a definite number of molecules of water round every molecule of chloride of sodium, there would not be an equable solution. So, I conceive, on the same sort of principle, without chemical combination, this dye influences a multitude of particles of cyanide in its vicinity. Here is a piece of gauze charged in the way I have described, and you notice its delicate violet tint; and we have the satisfaction of knowing that, wherever we see the dye, there is the antiseptic salt; you also observe that, when freely handled, it does not dust materially. Thus we have the two advantages combined, one of which I had not hoped for—that while we have the material dyed so as to show its presence by its tint, it is also prevented from dusting.

Note.—After the above paper had been read, I was mortified to find that some gauze, charged by aid of gentian violet, dusted to a very inconvenient degree. This appeared to be due to the influence of the bichloride of mercury, which was used in weak solution (1 part to 4,000) along with the gentian violet in the water in which the cyanide salt was diffused. Bichloride of mercury interferes, to a certain extent, with the precipitation of the gentian violet, and, leaving some of the dye in solution, causes tinting of the gauze independently of the presence of the cyanide salt, and at the same time it impairs the efficacy of the dye in fixing the salt to the fabric. Yet the use of the bichloride of mercury is a matter of great importance, for reasons which I have

given elsewhere,³ and it became necessary to look for some other dye on which the bichloride might not exert this prejudicial influence. I have found that there are several colouring matters which answer the purpose fairly well. Thus both carmine and Prussian blue attach the cyanide salt to a cotton fabric perfectly so long as it is moist, but when it is thoroughly dry they are not very good as regards the question of dusting. The dye which I have found to comply best with all the requisite conditions is logwood, or, rather, the essential ingredient of logwood, hæmatoxylin, which is a definite crystalline substance, and not unduly expensive.

The manner in which I have found it best to use this substance is the following: It is incomparably better to apply it to the freshly precipitated and wet cyanide than to mix it with the salt after its particles have been aggregated in the process of drying. It may be well to mention here the manner in which the cyanide is prepared. Cyanide of potassium, cyanide of mercury, and sulphate of zinc are mixed together in solution, in quantities proportioned to the atomic weights of 2 KCy, HgCy, and ZnSO₄+7 H₂O; the cyanide of potassium and cyanide of mercury being dissolved together in an ounce and a half of water for every 100 grains of potassium cyanide, and added to the sulphate of zinc dissolved in three times that amount of water, the precipitate is collected in a strainer, and, when well drained, is washed with two successive portions of water equal in quantity to that used for the solutions, namely, 6 ounces for every 100 grains of potassium cyanide, at least this amount of washing being essential in order to free the precipitate sufficiently from the highly irritating soluble salts which are associated with it in its formation. The precipitate having been thus washed and drained, but not dried, it is thoroughly diffused with pestle and mortar in distilled water (6 ounces for every 100 grains of potassium cyanide), containing in solution 1 part of hæmatoxylin for every 100 parts of the cyanide salt, the amount of which is known from the circumstance that the dry product of cyanide salt is almost exactly equal in weight to the potassium cyanide employed. Hæmatoxylin is readily soluble in a small quantity of hot water, and remains in solution when added to a large quantity of cold water. The cyanide salt, while it precipitates the hæmatoxylin, changes its colour to a pale bluish tint. This is advantageously enhanced by the addition of a little ammonia to the mixture, in the proportion of one atom of ammonia (NH₃=17) to each atom of hæmatoxylin (C₁₆H₁₄O₃H₂O=356). More than this amount proves prejudicial. The ammonia is added in a dilute form, and it is convenient to have the dilution such that one fluid drachm of the ammoniacal liquid shall correspond with one grain of hæmatoxylin. The dye is further economised by allowing the ammoniated mixture to stand for three or four hours, and stirring it occasionally, so that the ingredients may react thoroughly upon each other. If the mixture is filtered immediately, there is considerable loss of colouring matter. The dyed salt, having been drained and dried at a moderate heat, is levigated, and may then be kept for any length of time fit for use. When employed for charging a dressing it is diffused by means of pestle and mortar in solution of bichloride of mercury (1 to 4,000) in sufficient abundance to drench the fabric thoroughly, for which 4 imperial pints to 100 grains of the salt will be found adequate. This will give a percentage of between 2 and 3 of the cyanide to the dry gauze. For reasons which I have stated elsewhere,⁴ the gauze should always be used moist; and if it be prepared for immediate use, as by the dispenser of a hospital, the process of drying may be omitted; the gauze, after being hung up for a while to drain, being deprived further of superfluous moisture by placing it for a while in a folded sheet. It may afterwards be conveniently kept moist by wrapping it in a piece of mackintosh cloth. When obtained dry from the manufacturer, it should be moistened again with the weak corrosive sublimate solution before it is used.

AN article recently published in the *North American Review* entitled, "The Open Door of Quackery," is the joint production of Dr. Austin Flint, Professor Doremus, and Dr. Eggleston. The last named is responsible for the statement "that there are not a dozen American medical colleges out of 117 that would be tolerated for a moment in any foreign country that pretends to be civilised." The *Medical Record of New York* quotes this statement with approval.

³ Vide JOURNAL, loc. cit.

⁴ Vide JOURNAL, loc. cit.

REMARKS

ON

VARIOUS DISEASES OF THE SKIN,

Made at a Demonstration of Patients given at the East London and South Essex District of the Metropolitan Counties Branch.

By STEPHEN MACKENZIE, M.D., F.R.C.P.,

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Physician in Charge of the Department for Diseases of the Skin.

1. THE first case shown was one of prurigo infantum. The patient was a male child, aged 2½ years. The skin bore evidence of the irritation in numerous blood crusts formed on papules that had had their heads scratched off. No other definite lesion was present at the time of the demonstration. The father, however, who accompanied it, said that the disease began at the age of six months with "bumps" like the sting of nettles or bug bites, and that these reappeared from time to time. The itching was greatest at night, being forgotten or absent in the daytime. The child was not badly nourished, but patients often become wasted, peevish, and miserable from the constant interruption to their night's rest. The disease is generally worse in cold weather. This is the disease described as lichen urticatus by many writers. In most cases it persists for some years, but about the age of 7 or 8 gradually disappears. In a few cases it persists and becomes what is known as Hebra's prurigo. In the majority of cases local applications do all that can be done for its relief. The most important of these is a bath (ordinary children's bath) of warm water, to which one or two tablespoonfuls (according to age) of liq. carbonis detergens have been added. The bath should be placed before a fire, and the child be given a sponge, and encouraged to sponge itself all over for half-an-hour, the temperature of the bath being maintained during this time. It should then be quickly dried and put to bed. In addition to this, a lotion of carbolic acid, made less volatile by the addition of glycerine (acid. carbolic. ʒss.—ʒj, glycerine ʒj, aq. destil. ad Oss.), should be sponged rapidly over the child when awakened by the itching. Most cases are controlled by this treatment, though few are cured. When the child is worn out by restless nights, a dose of chloral, 3 to 8 gr., at bedtime, will often get a good night's rest, with diminution of the itching; or tr. cannabis Indicæ (m. v. to x) three times a day may be given. Occasionally three to four grains of quinine, given in milk at bedtime, is of great service.

2. The next case shown was a boy of about 10, but looking younger. His father said that four years before, after a severe attack of measles, a spot appeared on his face, which continued to increase in size, and was followed by the appearance of similar spots in various parts of his body, about eighteen in all. They each increased slowly in size, varying from that of sixpence to a five-shilling piece. He had been sent to the country and to the seaside without benefit; the only treatment that had been of service was "an operation" which had succeeded in some cases but not in others. There were a number of patches of reddened and thickened, rather translucent, skin, slightly tubercular in places. The case was shown as one of either strumous dermatitis or multiple lupus. Though no logical distinction could be drawn between the two, the term strumous or tubercular dermatitis was convenient for cases in which the disease was in nature more inflammatory than neoplastic. It destroyed the skin, however, leaving scars, and the only effectual treatment was destroying each patch.

3, 4. Next two cases of lupus erythematosus were exhibited, both undergoing cure. The first was that of a girl, aged 16. When first seen it had lasted eighteen months, and affected the bridge of the nose and each cheek in red patches covered with seborrhœic greasy scales. There was slight destruction of the skin in places. Citrate of potash, in drachm doses, had been given. Some patches had been treated with the application of collodion, and others with Duhring's lotion of sulphide of zinc (zinci sulph., potas. sulphuret., aa gr. xxx., sp. vini rect., ʒiij, aquæ ʒiv). The latter application had succeeded best in this case. The second case was a woman, aged about 40, who had the disease over an extensive area, including the scalp. She was practically cured, only a small