Thesis

for Degree of Doctor of Medicine

by

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in D 1932
To

The Dean of the Faculty of Medicine

and

The Senatus Academicus

University of Edinburgh.

Sir & Gentlemen:

As a candidate for the degree of Doctor of Medicine I herewith submit my Thesis on

"The Treatment of Lupus Vulgaris by Scraping followed by the application of Nitrate of Silver, as illustrated by fifteen cases."

I have the honour to remain

Your Obediently
I wish to bring before you the method of
treatment by scraping followed by the application
of Ag NO₃ of fifteen cases of Lupus Vulgaris which
I had the opportunity of attending whilst for three
and a half years House Surgeon to the Gloucester
Infirmary.

This treatment has with the exception of one
case (S. W. Case IV) proved quite successful,
and on these grounds I advocate it in preference
to the other methods.

All the cases with two exceptions have been
patients suffering from the disease on the Head
or Neck, and in some of them it has pursued a
course of many years and led to marked disfigure-
ments, yet with the exception of the cases I have
mentioned above I have not failed to bring about
a successful issue.

The treatment by scraping is an old one, and
I do not arrogate to myself that I have discovered
anything new in it, but what I wish to contend is
that in the majority of cases success is not ob-
tained because the operation has not been thorough
enough.

Also one operation of scraping may not be
sufficient and it requires to be repeated in some
cases again and again, but will in the end I am
sure eventually bring about a cure.
The fifteen cases I bring before you are not selected cases, but are the whole cases of Lupus that presented themselves for treatment at the Gloucester Infirmary from August 1892 to December 1895.

The method of treatment I have adopted is as follows:— The Scraper is large at one end and small at the other, five inches long. The centre of the spoon is cut away, leaving a ring, the advantage of this being that the debris passes through and does not collect in the concavity of the spoon — see diagram.

The patient having been anaesthetised, with the small end and sharp edge of the scraper held sideways I draw a line in the sound tissue completely outside the diseased area. This line in depth goes completely through the skin to the cellular tissue. The advantages of it are

First, that it makes a landmark when in the operation the parts are obscured by blood, and

Second, that in the healing process a thin line of fibrous tissue surrounds the diseased area and offers great resistance to the spread of the disease if the first scraping is not successful, or if any points have been overlooked.
The most dependant part is then attacked in section with the large end of the scraper, as much force being used as almost the instrument will stand without giving way. All the pits and depressions are thoroughly cleaned out and the surface rendered as smooth and even as possible. The small end is then used over the whole surface, the pits being treated to a rotary movement of the instrument held almost horizontally, and finally the surface is again gone over with the large end. All tags are carefully removed if necessary with scissors, and the surface covered with a sponge to stop hemorrhage, whilst another portion is operated on if the surface is large.

When the surface is dry, it is rubbed over with the solid stick of Nitrate of Silver, used as a pencil, care being taken that the floor of all pits and depressions are carefully explored.

The Eschar formed by the Nitrate of Silver dries, and no dressing is needed.

Before the patient recovers consciousness a morphia injection gr. ¼ is given.

Under this Eschar many cases of Lupus heal, and when the scab drops off the case is well.

The pain suffered by the patient for the first twelve hours is in some cases where large portions of the face have been operated on severe, but after
that time it disappears, and there is no uneasiness except a feeling of constriction in the part.
The Eschar separates usually by the end of a week, in some cases the part being healed, in others showing a granulating surface.

This granulating surface is treated with Boracic Acid Lotion fomentations, or Lead Lotion, or Ung Zinci, whichever suits it best, and very shortly heals if the tubercle is removed. Where the granulations are redundant they are painted with a Cocaine Solution 2% and Nitrate of Silver applied.

If the surface operated on be large especially on the face the dressing should be applied in small pieces size of a penny, and on old linen, as it is easier to remove, is less painful, and on the face whatever application is used can be better applied to the whole raw surface.

If only a small portion refuses to heal that part should be scraped again very soon, care being taken not to disturb the very thin new skin that is formed in its immediate vicinity - the unhealed portion being scraped with as much vigour as at the first operation.

When all is apparently well the patient should be seen again in three months, when if necessary such parts as need it must be done again and again
until cure is effected which in the end will be brought about.

If this method is used there will be very little cicatrisial contraction or marking, many cases of what at the time seemed very rough treatment shewing afterwards no disfigurement at all. Bands of fibrous tissue do however sometimes form in severe cases, especially round the eyes producing ectropion, and from the chin down to the neck. These may be treated by subcutaneous division, or in slight cases by careful massage. If severe by open division and Thirchs grafts. In the application of the Nitrate of Silver about the eyes care must be taken to prevent any going into the eye, and if such appears to have happened a Lotion of salt solution must be applied to the eye immediately.

Where after operation the cure is apparent, but the skin takes on a dry scaly appearance, I have found the application of cream rubbed on with the finger prove of great assistance in rendering the skin smooth and soft.

In operations about the nose and ear these cavities should be well plugged with cotton wool before the operation is commenced - In the Nose to prevent the blood getting into the Trachea, and in the Ear to prevent a clot forming which when
it dries, give great inconvenience from causing deafness, and may also from pressure on the tympanum prove extremely painful.

The scraper possesses an enormous advantage in being diagnostic, that is to say it does not remove sound, but only diseased tissue.

The reason I have chosen Ag NO₃ in preference to stronger escharotics as an application after the scraper is, that it destroys any tubercle that may have been left by the scraper on the surface, but by coagulation of the albumen its action is prevented from penetrating into the deeper tissues, and thus there is very little loss of substance in the slough that comes away, and consequently very little cicatrisation and disfiguration.
Case I

E. S. Age 19. Female. Presented herself at the Gloucester Infirmary on August 1, 1892, suffering from Lupus Vulgaris of the whole of the left side of the face including the left side of the nose and upper lip. She had suffered from the disease since she was 12 years of age, and her treatment had consisted of local applications of different ointments. The disease was steadily progressing and was she feared extending over the nose to the right side of face.

On August 3rd she was anaesthetised and the whole of the face covered by the disease was thoroughly scraped and the solid stick of Ag NO₃ applied to the raw surface. She suffered a good deal of pain immediately after the operation, but the next day was comfortable. At the end of a week the margins of the Eschar began to separate and when the scab came finally off a great portion was found healed. The centre of the cheek was not healed in three or four places, which were united by bridges of skin. These were left to granulate and treated with an application of Zinc Ointment, and in the course of a fortnight she left the Hospital apparently well, with a small granulating surface the size of 6d. in the centre of the cheek.
On July 10, 1893 she again presented herself with many tubercular nodules appearing over the old surface, and the portion of cheek which was granulating on her previous discharge, much broken down. There was no spread of the disease whatever at the margins, and a great deal of the scraped portion was quite sound. On July 11, the diseased portions were thoroughly scraped, Ag NO₃ applied, and she was discharged shortly after with her face healed with the exception of the granulating surface in the centre of the cheek.

Aug. 15, 1894. She again appeared. Few nodules having broken out again, and the centre of the cheek shewing tubercle.

Aug. 16. Scraped. All healed with exception of centre of cheek. Discharged.

July 1895. Appeared again. Centre of cheek size of 1/- only part affected. All the other surface quite sound and healthy. July 9. Scraped, Ag NO₃ applied - discharged with wound healed.

Nov. 19, 1895. Appeared with central spot in cheek size of 3d, which had broken down week before admission.

Nov. 20. Scraped, Ag NO₃ applied. Discharged well.

March 15, 1896. Patient perfectly well. No
sign of tubercle. Skin over whole face quite sound and firm. Hardly any disfigurement to face and no cicatrisial contraction.

Case II

L. W. age 21. Female. Lupus of Forehead right and left sides extending for half an inch above eyebrows to root of hairs. More marked on right side than left. First began 7 years ago as a very small spot on forehead, then other spots appeared and these have coalesced to form the present mass. Has had applications of various ointments which have not checked disease.

Sept. 4. 1892. Scraped, Ag NO₃ applied. Healed up very quickly, and discharged apparently well.

July 30. 1893. Returned with few nodules in centre of old mass. No spread of disease whatever and the major part of the surface which was operated on quite sound and firm.

July 31. Diseased portions scraped Ag NO₃ applied. Left Hospital well.

June 1894. Presented herself for examination. Quite well, no recurrence. No disfigurement or cicatrisial contraction.
Case III

E. H. age 18. Female. Lupus first began to appear in centre of right cheek 4 years ago. Round patch the size of 5/- piece. Local applications of ointments had been applied. No good result: disease slowly spreading in all directions.

Dec. 6. 1893. Scraped, Ag NO₃ applied. Complete healing under scab. Discharged well.

Aug. 1894. No return of disease, no cicatrisation, no disfigurement. Difficult to make out the spot where the old disease was.

Case IV.

S. W. age 43. Female. Lupus over whole face, nose and both ears. From forehead to below chin. First began when patient was 13 years old. Has lost portion of lobules of both ears and also portion of tip of nose with ulceration of inside of nose.

Jan. 24. 1893. Scraped, Ag NO₃ applied. Right side only operated on. Recovered fairly quickly and discharged with the right side of face much improved.

Jan. 11. 1894. Readmitted with several places shewing tubercle, also interior of nose not benefit-ed by previous operation. Great part of previously operated on part remaining sound: disease not spread at the margins.


Oct. 15. 94. Readmitted. Several parts of face broken down. Interior nose and ears no better. Now tubercular ulceration appearing on the hard palate.

Oct. 16. Diseased portions of face scraped and Ag NO₃ applied. Actual cautery to interior of nose and hard palate. Patient discharged with face much better but little improvement to interior of nose or hard palate.

May 11. 1895. Readmitted, with ulcerating points on face both sides, not so many as on Oct.94. Interior of nose and mouth shewing improvement but still the presence of the disease. Ears much better. No spread of disease at margins. Face scraped, Ag NO₃ applied. Interior of nose and mouth treated with the actual cautery.

Nov. 2. 1895. Returned in much the same condition as May 11. 95. Same treatment applied and patient left Hospital better.
This is one of the worst cases of Lupus that I have seen, and when I first operated on her, I told her it would probably be 3 or 4 years before she would be cured. She is not cured yet, but I am sure if the treatment is persevered with that her final return to health is merely a question of time.

Case V

T. B. age 21. Male. Admitted April 15, 93. with Lupus of whole of right side of face, right ear running along right side of nose, below right lower eyelid down chin on to right side of neck.

Has suffered for last seven years, and had local applications of ointments only. Cartilage of right ear much destroyed.

April 17. Scraped, Ag NO₃ applied. The ear and lower part of face only operated on. Whole surface healed very quickly and patient discharged.

On June 25, 93. he returned to have the rest of his face operated on. The ear and lower part were then keeping quite sound with the exception of a few nodules in the operated upon portion. These were scraped again at the same time that the upper portion was operated on. Patient discharged apparently well.
July 15, 1894. Patient readmitted. No extension of disease whatever at the margins. Most of scraped surface sound and firm, but few isolated tubercles apparent. These were scraped and patient discharged well.

April 96. Patient well - no return of disease.

Case VI

C. A. age 40. Female. Admitted Nov. 16. 93 with Lupus of nose. Suffered for last 8 years but the disease confined to tip and whole lower half of nose. Has had applications of ointments.

Nov. 19. 93. Scraped, Ag NO3 applied. Whole surface healed very quickly. Discharged apparently well.

Aug. 94. Nose quite sound. No disease apparent.

Case VII

E. D. age 14. Female. Admitted Feb. 15.94 suffering from Lupus of left cheek, slightly larger than 5/- piece in size. Disease began 2 years ago and very slowly extending. Has had local appli-
cations of ointments. Scraped, Ag NO₃ applied. Whole surface except small portion in centre healed up under the scab. Discharged well.


Case VIII

S. W. age 36. Female. Admitted March 2, 1894. suffering from Lupus of right elbow. Disease has centre over Olecranon and extends for 4 inches up the arm and for same distance down the arm on posterior surface. Does not extend to anterior surface over the centre of elbow joint. Was first attacked four years ago. Has no trace of disease on any other part of body.

Scraped, Ag NO₃ applied. Arm put on splint. Healed up somewhat slowly. Discharged apparently well.

Dec. 94. Quite well. No return of disease.

Case IX

C. W. age 20. Female. Admitted May 14.94 suffering from Lupus of the whole circumference of right leg, from below knee to ankle, and running
on the dorsum of the foot. First attacked five years ago. Has no sign of Lupus on any other part of body. Suffers from congenital syphilis.

May 15. Whole surface scraped, Ag NO$_3$ applied. In this case the raw surfaces were a considerable time in healing. Discharged healed with exception of four places each about the size of a shilling, at the base of each of which there was a sinus running vertically into the cellular tissue about half an inch.

Sept. 14. Readmitted. The four surfaces above mentioned not healed, and other nodules appearing on part previously operated on.

Scraped, Ag NO$_3$ applied - Discharged with the four surfaces granulating.

Dec. 17. Readmitted. Four surfaces not healed. All the other portion of leg quite sound.

These four surfaces again scraped and Ag NO$_3$ applied. Two of them healed up, and patient discharged with two places not healed.

May 6, 95. Readmitted to have two places operated on. After scraping one of them healed, but the other was granulating on her discharge.

Feb. 96. One spot still showing Lupus, whole of rest of leg quite sound and free from disease.

When patient first admitted she came in on crutches but after the second operation Sept. 94.
she was able to walk with the help of one, and she now walks without any lameness whatever.

Case X.

M. R. age 57. Female. Admitted July 2, 95. suffering from Lupus of neck and chin on right side. Has suffered from disease for years, but exact time of onset could not be ascertained. Disease evidently of very slow growth.

July 5. Scraped, Ag NO₃ applied. Wound healed very quickly. Patient discharged apparently well.


Case XI.

C. C. age 23. Female. Admitted July 11, 1895, suffering from Lupus of Nose. Disease began two years ago. Tip and lower part of nose chiefly affected. Cartilage not affected. Has had local applications of ointments.

July 14. Scraped, Ag NO₃ applied. Most of surface healed up under scab - Discharged apparently well.
Sept. 18. 95. Readmitted with a few nodules appearing. No extension of disease at margins, and most of operated upon portion sound and healthy. Diseased parts scraped, Ag NO₃ applied. Discharged with whole surface healed.


Case XII.

F. G. age 38. Female. Admitted Aug. 6. 1895 suffering from Lupus Erythematosus, which first appeared 4 years ago. I determined considering my apparent success in the cases of Lupus Vulgaris to subject her to the same treatment. The disease was of the typical butterfly type. Aug. 9. Scraped, Ag NO₃ applied. Right side only operated on. Whole surface healed very quickly and patient discharged. On discharge the scraped portion was much better and not so apparent, taking on more the appearance of healthy skin.

Oct. 8. 1895. Patient presented herself and requested that the left side of the face might be operated on. The right side was decidedly better, and stood in contrast with the left side which had not been touched. There was no extension of the Lupus Erythematosus at the margins. Left side
operated on, and patient discharged. Patient has not been seen since.

Although there was improvement in this case, it was not such as to recommend the course of treatment much to me. The improvement consisted in a diminution of the hyperaemia of the parts after operation, and therefore a less unsightly appearance of the face.

Case XIII.


Scraped, Ag NO₃ applied. Most of surface healed up under the eschar. The rest very quickly by granulation. Discharged apparently well. Seen January 1896. Part quite sound. No sign of any return of Lupus.

Case XIV.

A. B. age 32. Female. Admitted Sept. 20. 1895. Suffering from Lupus of the nose and right side of face. First attacked when 18 years of age.
Has had local applications of ointments, but the disease slowly progressing. Part of the cartilage towards the tip at the right side of nose is partially destroyed.

Scraped, Ag NO₃ applied. Wounds granulated up and discharged apparently well.

Seen in Dec. '95. No return of disease. No spread at the margins, all the operated on portion being quite sound. There was some disfigurement at the tip of the nose where the cartilage had been eaten into, and there was a small band of cicatrisial tissue extending from the nose to the right side of cheek. This she was advised to massage herself. Has not been seen since.

Case XV.

D. S. age 24. Female. Admitted Oct. 11. 1895 with Lupus of right ear extending on to the cheek. First attacked when 18 years of age. Great portion of cartilage of ear destroyed.

Scraped, Ag NO₃ applied. Cheek healed soon, but the ear was some time granulating over. Discharged healed.

Dec. 22. 95. Readmitted with some nodules on ear. Cheek sound and no trace of disease. Ear scraped and Ag NO₃ applied. Ear healed quickly,
and discharged apparently well. Patient has not been seen since.

Identify that this chart has been composed by me.

April 1876.