CLINICAL LECTURE ON THE TREATMENT OF CARBUNCLE BY SCRAPING.

Delivered at St. Mary's Hospital, January 27th, 1888.

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GENTLEMEN,—I shall make no apology for offering to you some remarks upon a disease which was thought worthy of a place in the Clinical Lectures of Sir James Paget. I wish, however, to-day to speak more especially on the treatment of carbuncle by that plan of free scraping away which you have seen practised in the hospital, and I do not intend to take up your time by a description of the disease, of the symptoms it presents, or the course it runs. I assume that you are familiar with the usual appearances, and that by the size and severity of the local inflammation, by the angry look, and the boiling out through many openings in the sloughing skin of the unhealthy gangrenous tissue beneath, you are able to say when the term "carbuncle" may be properly applied. I assume also that you know what is the general condition of patients thus afflicted, how, even in cases where there is no such special debilitating cause as diabetes, there has commonly been an antecedent state of ill-health, brought about very possibly by over-work, insanitary surroundings, or insufficient food, and how the carbuncle tends further to increase the debility so induced, by establishing one of those vicious circles which we so continually are trying to break down. As debility led originally to the carbuncular inflammation, so this in its turn increases the debility, until the patient's condition may be one of great danger, demanding the use of every means likely to keep up his strength, and thereby obviate the tendency to die. With these things I assume your familiarity, and if you turn to your textbooks of surgery to find how to treat the patient, you will learn a good deal which is of importance as to maintaining his strength, but you will find little that is satisfactory as to the local treatment of the disease. On this point opinions have differed widely, some surgeons advocating free crucial incisions to relieve both tension and pain, at the risk even of much bleeding, which is clearly a thing not to be lightly regarded in the circumstances; others thinking the separation of the slough may be hastened by pushing small pieces of potassa fusa through the skin-holes into the gangrenous tissue beneath, a plan of treatment from which I hope myself to be preserved; some advising pressure; most recommending the use of well-made and frequently changed hot linseed poultices for the relief of the pain, for the softening and detachment of the sloughs.

With the method by incision Paget deals at length in the lecture to which I have referred; but, without repeating his arguments against it, I may tell you that, from the observation of many cases, he had arrived at the general conclusion that the best of all treatments was to "do nothing," understanding by that phrase that his patients were "carefully fed, washed, cleaned, and bedded, and their carbuncles were very skilfully dressed and washed with proper things, and every care was taken to shut out all untoward influence from them." Thus treated, "no complications occurred, and therefore the cases remained without treatment, as it is said—that is, without medicine, and with no active surgery, no incisions, or anything of that kind." And then he goes on to speak of the value of poultices and perfect cleanliness; of the need in some cases of opium; of the smaller need than is commonly imagined for excessive feeding or stimulants; of the vast importance of letting the patient have very free air. Nor had the experience of ten more years, and the opportunity of having seen a much larger proportion of fatal cases, as we are told in an appended note, led him to deviate from the plan advised when the lecture was given.

Now, all these methods of treatment, whether by incision, by potassa fusa, by pressure, or by poulticing, have this in common, that the tissue which has been destroyed by the violent inflammation is left to be got rid of in Nature's own way, by cessation of the gangrenous process, by the formation of granulation tissue,

and by gradual detachment of the sloughs which have been formed in and beneath the skin. During this slow and tedious process the patient is subjected to many risks, and has much to contend against, the worst of them being exhaustion and pain, septicæmia and pyæmia, and it is from one or other of these last conditions that death commonly ensues.

In speaking of acute septic gangrene, you have heard me advise that the best thing for the patient is to get rid as soon as possible of the gangrenous area or limb, and, as an example, you could not have a better case than that of the lad whose thigh was amputated on the 16th, whose temperature fell at once from 106° to 99°, and who was rescued in the nick of time from a state of supreme danger.

Descending from great things to small, I believe that the risks incidental to carbuncle may be avoided, and the general condition of the patient very rapidly improved, by the free removal of the carbuncle by scraping with a Volkmann's spoon, or rather with Lister's scraper. You know perfectly well the many conditions in which this comparatively new and most useful instrument is employed in surgery: for scraping away unhealthy granulations, strumous or lupoid, diseased glands or synovial thickenings, and in a hundred other ways, but in none is it, I think, of more immediate or practical benefit than for the bodily removal of the sloughing tissue of a large carbuncle. You object to it, perhaps, that there must be severe bleeding, the very thing we spoke of as undesirable in the treatment by crucial incision. Experience, however, shows that there is nothing of the kind. We have been astonished at the singularly little bleeding which has arisen even in the most extensive scraping, and I feel pretty confident that there is no danger on this score.

The mode of treatment is simplicity itself. The patient is anaesthetised, and if the slough has not already begun to boil through openings in the skin, a small central incision, or incisions, is made into the parts beneath, and then with the spoon you scrape out every particle of sloughing tissue, working down into the depths, going from part to part, controlling by gentle pressure any venous oozing there may be here while you are scraping there until the whole slough is cleared out; and such skin as seems to be dead, blue, and bloodless you may cut away with knife or scissors, although it is marvellous how much of apparently worthless skin will return to life, and had better be preserved. Then, having well irrigated the large open wound with perchloride or carbolic lotion, you dust iodoform over it, bandage upon it with some pressure wood-wool pads, and the procedure, which hardly deserves the name of an operation, and which has not taken many minutes, is at an end.

The following cases may be cited in illustration of what has been said and in support of the usefulness and value of this plan of treatment, which I cannot help thinking will come in time to be very generally employed.

CASE I.—R. F., aged 41, admitted April 27th, 1887, looking wasted and very ill, has been out of work for a long time, has been starved, and been mentally much depressed. A carbuncle has been forming between his shoulders for the last eighteen days. It measures eight inches in one diameter, six inches in another, and is boiling out by many openings. He is in great pain. His pulse is very feeble, his morning temperature is 100.2°, and he looks like a man who has been starved. There is no albumen or sugar. On April 29th the carbuncle was freely scraped away; there was no hæmorrhage. The same evening his temperature was 103.6°, and in the following morning and evening 100.6° and 100.4°. He expressed himself as already feeling much better, and thereafter, with a normal temperature, the history is one of rapid improvement. In five days the surface was covered with healthy granulations, and healing took place in the usual way, being helped later on by skin grafts, under the careful dressings of Mr. Kershaw. He left the hospital on June 21st.

CASE II.—H. B., aged 65, the subject of a circular carbuncle, five inches in diameter, on the back of the neck and occiput, was admitted on May 25th. It had begun as a pimple three weeks before, and was now boiling out in a typical manner. He was very weak and ill, and in great pain. On May 26th the whole thing was scraped away; there was no bleeding. The large surface cleaned rapidly, and by June 6th was covered with healthy granulations. His rapid general improvement was in every respect most striking. After the removal of the carbuncle he lost all pain, and soon began to enjoy his food. He was discharged on August 2nd.

CASE III.—N. S., aged 55, was admitted on September 7th. Has

been suffering for some time from cold and indigestion, and looks weak and ill. There is no albumen or sugar. He has a carbuncle four inches in diameter on the back of his neck, which began fourteen days before with aching pain, and the formation of a pimple which rapidly increased in size. The pain is great, although the carbuncle is much broken down. On September 8th the carbuncle was scraped away by my house-surgeon, Mr. Crowle. By September 16th the surface was covered with healthy granulations, and healing forthwith went on in the usual way. His general appearance at once improved, and from the day after the operation he had freedom from pain. Discharged October 4th.

Our latest case was treated yesterday by Mr. Norton, my present house-surgeon. To-day the man looks much better, and is quite free from the severe pain which he was suffering before the scraping.

That each and all of these patients derived immense benefit from the treatment, there could be at the time no doubt, nor is there any, I think, that the risks of septicæmia, pyæmia, and exhaustion were very much lessened. Clearly, it cannot be otherwise than an advantage to get rid as early as can be of so nasty a thing as a carbuncular slough, as I hold it is the right thing to get rid of sloughs however caused. You may remove them too late, you can hardly do so too soon. Many of you know the woman in Manvers ward, who was so long an in-patient because of an extensive burn of arm, breast, side, and axilla, who began on the sixth day to wander and have high temperature, and to be distinctly septicæmic, and who rapidly improved, and whose temperature fell as soon as Mr. Crowle had carefully scraped away the sloughing tissue. So, also, is it with the scraping of carbuncles.

This plan of treatment has, no doubt, occurred to and been practised by other surgeons, but a search through books and journals has enabled me to find only one paper bearing on the subject. The paper "On Scraping in Surgery" was well worth finding (*Liverpool Medico-Chirurgical Journal*, January, 1887, p. 41); and I will read to you what Mr. Teale, the writer of it, says.

"*Carbuncle*.—Probably in no disease involving severe pain, and occasionally threatening life, is treatment by scraping more conspicuously of value than in carbuncle. A central crucial incision of moderate size, with vigorous scraping in every direction in which the scraper can penetrate into the half-dead tissue, will cleanse the diseased mass of much of the half-dead, putrefying, poisonous material. This main attack should be supplemented by smaller crucial incisions and scrapings in the contiguous carbuncular skin, and by numerous small incisions or lancet-punctures into any neighbouring skin, which, though not carbuncular, is oedematous, infiltrated by the spreading poison, and already half-condemned to a destructive career. Having rid the mass as far as possible of all diseased, decaying, infecting material, the resulting cavities and crevices should be well soaked, either with pure carbolic acid, carefully used so as not to scald the skin, or perhaps more advantageously with 'glycerin. acid. carbol.' so that every crevice where half-dead tissue remains may be soaked and penetrated. Finally, the raw surface is well charged with iodoform, and dressed with salicylic acid or some such absorbent antiseptic material. The result is cessation of pain and feverishness, restoration of normal temperature, and a rapid establishment of comfort, convalescence, and healing."

I could wish for no better encouragement in bringing this mode of treatment to your notice than that it should have found an advocate in Mr. Teale, of Leeds.

BEQUESTS.—Lord Hindlip bequeathed £1,000 to the Burton-on-Trent Infirmary.—The Sheffield General Infirmary has received £500, and the Public Hospital and Dispensary, £250, under the will of Mr. Samuel Fox, of Deepcar.—The Glamorganshire Infirmary and Dispensary has received £500 under the will of Miss Mary Fothergill, of Hensol Castle.—Mr. Henry Browning, of Grosvenor Street, bequeathed £300 to St. George's Hospital.—Mr. George Ash bequeathed £200 to the Kent and Canterbury Hospital.—Mr. Michael Ganly, of Shelbourne Road, Dublin, bequeathed £100 each to the Mater Misericordie Hospital, St. Vincent's Hospital, the Hospital for Incurables, and the Adelaide Hospital.—Mr. Charles Chevely, of Widford Lodge, Chelmsford, bequeathed £100 to the Essex Idiot Asylum at Colchester, £100 to the Chelmsford Infirmary, and £100 to the Dispensary.—Mr. Thomas Samuel Bolitho, of Trengwainton, Penzance, bequeathed £100 to the local infirmary.

CASE OF CEREBRAL ABSCESS SUCCESSFULLY TREATED BY OPERATION.

SURGICAL HISTORY OF THE CASE.

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(Continued from page 531.)

I SAW the patient on December 9th, 1887, in consultation with Dr. Ferrier. There was a rather offensive purulent discharge from the left ear, the pinna and external auditory meatus being tender; the passage also was a little swollen and narrow. Wiping out the pus completely was rendered difficult by this tenderness, and examination of the membrana tympani consequently very incomplete. It was, therefore, doubtful whether the opening was in the posterior segment, as it appeared to be, or not.

As set forth in the medical history of the case, the otitis was supposed to have commenced six weeks before with *malaise*. Discharge of pus began with severe pain three weeks before admission, but soon stopped, namely, in ten days. It reappeared the day before seeing him, but in much less quantity.

On palpation and gentle pressure the scalp and pericranium were found to be tender at a point which was situated just in front of a vertical line drawn through the external auditory meatus at about the junction of the third and lowest fourths of the distance between the meatus and the sagittal suture. This tender point above the meatus clearly corresponded with the superior temporo-sphenoidal convolution about opposite the lower border of its middle third, that is, vertically under the lower end of the fissure of Rolando.

At the same time, as described in the medical history, there was almost complete aphasia, marked paresis of the right side of the face, and less marked paresis of the movements of the right upper limb, especially those of the hand and digits. In both discs there was intense optic neuritis, the same being accompanied by hæmorrhage in the right disc, that is, that of the side opposite to the abscess. It may be remembered that in the case published by Dr. Gowers and Mr. Barker, the optic neuritis was also most intense in the opposite disc. Considering the proximity of the abscess in each case to the fibres of the optic tract this, at the first sight, somewhat extraordinary fact may have a simple anatomical explanation in view of the decussation at the chiasma, and the fact of the lymphatic vessels lying for the most part parallel to the plane of the fibres.

December 10th, 1887. The patient having been put under chloroform, and the previous treatment of the head, including very thorough cleansing of the external auditory meatus with boracic acid, etc., having been carried out, as detailed in a paper by myself (see *JOURNAL*, October, 1886), an incision was made of the following T shape. The horizontal limb was almost semicircular, the centre of the convexity being at the junction with the vertical limb. The anterior end of the incision began at the superior temporal ridge, and the posterior terminated at a vertical line drawn behind the middle of the parietal eminence. The junction of this horizontal limb with the vertical one corresponded with the painful spot. The vertical limb was simply carried down in front of the pinna as low as the tragus.

The skin and fat of the flaps thus marked were first reflected, and then the temporal muscle and periosteum were similarly turned off the bone. At the seat of the painful spot the bone was doubtfully yellow. When an inch disc of bone was removed at the same place, the dura beneath was found to be congested, at the same time bulging, without pulsation, and of a dark, almost purplish, colour. It was therefore clear that the abscess was pointing towards this spot. The dura was then opened, and the dark-red oedematous brain tissue bulged strongly through the incision. As it was fairly certain that the abscess extended deeply into the temporo-sphenoidal lobe, the lower half of the circumference of the hole in the bone was cut away into a V-shaped notch. The dura was opened further by another incision vertical to the first, just as in the skin. The brain was punctured with an ordinary trocar and cannula (about 3 millimètres diameter), the pus liberated, being first met with at about the depth of 1 centimètre. The amount