Subtrochanteric osteotomy of the shaft has also been proposed, and it is claimed for it⁴ that it is an operation capable of also dealing with that curvature of the upper portion of the shaft which may be mistaken for coxa vara or associated with it. I have not as yet found a case of enough gravity to demand any form of osteotomy, nor do I think, from what I have seen that such instances are like to prove common. If osteotomy be called for and performed, the thigh must be forced into good position, and so retained until union has taken place.

REFERENCES.

¹ *Practitioner*, April, 1896. ² See Mr. Lacy Firth in *BRITISH MEDICAL JOURNAL*, November 5th, 1898. ³ Ogston, *loc. cit.* ⁴ Muirhead Little, *BRITISH MEDICAL JOURNAL*, November 5th, 1898.

ON THE EXCISION OF SOME CARBUNCLES.*

By RUSHTON PARKER, M.B., B.S., F.R.C.S.,

Professor of Surgery in University College, Surgeon to the Royal Infirmary, Liverpool.

IN THE *BRITISH MEDICAL JOURNAL* for March 31st, 1888, and in the *Provincial Medical Journal* for April, 1893, I wrote in favour of the operative extirpation of carbuncle as a protection to life in severe cases, and as saving both pain and time in all. My own adoption of this practice was based upon the experiences of M. Lefort, of Paris, published, it is said, in 1881, but first brought to my notice somewhat later. One of my objects in bringing it forward to-day is to further its more extended employment.

In the papers above referred to I briefly related a dozen cases, and have since had five more. Some were mild, and could without doubt have got well without interference, though in every such case the patient was grateful for the speedy removal of the trouble; while in severer cases the benefit was such that several lives appear to have been certainly saved by this means.

There seems not yet to be any general advocacy of extirpation by surgical authors, though the practice is already employed by many surgeons, so that it may be fitting to dwell for a moment upon the alternative treatment, which resolves itself into (1) palliative expectation, and (2) free incision. These alternatives have been most completely and judiciously discussed in Sir James Paget's *Clinical Lectures and Essays*, and the conclusion at which he arrives is that no advantage whatever can be shown to have resulted from the practice of mere incision. This conclusion I have accepted ever since the appearance of the first edition in 1875, and I am in favour of the more complete alternative of total extirpation, failing which, of palliative extirpation. The evils to be feared from carbuncle may be classed under two heads: (1) pain, and (2) septic poisoning; to the exhausting effects of one or other, or both, of which fatal cases are due. In the event of diabetes or albuminuria the inflammatory and gangrenous qualities of carbuncle are rendered more poisonous and dangerous.

In mild cases the pain may be quite trifling, or at worst patiently borne by hopeful subjects; while of septic poisoning there may be no trace. It is not from a study of mild cases alone that energetic curative methods arise, or carry conviction; for trivial carbuncles often get well of themselves, without interference and whatever be the treatment.

But in carbuncles that are already severe—and the severest carbuncles have always had a mild commencement, however short—it is of the utmost importance that the medical attendant should have a clear and early prospect of what are the resources of his art, and whether or no there be something curative that can be done, if thoroughly undertaken, and not too late.

It is not easy to comprehend what possible good can result from mere incision, in spite of the high authorities that have favoured it. The mere fact that carbuncles have done well after it is not enough, for as much can be said of even severe carbuncles when let alone and soothed by local palliatives and wise nursing, as is clearly shown in Sir James Paget's work above referred to. The incision does not relieve the pain, nor does it do anything to prevent or arrest septic poisoning.

*Read at a joint meeting of the Lancashire and Cheshire and North Wales Branches of the British Medical Association, at Chester, September 25th, 1898.

Moreover, it is a severe operation, requiring an anæsthetic, and liable itself to be followed by septic poisoning through newly-opened channels.

The case is quite different with extirpation, which, however extensive, is not a much more severe operation than incision. But what a contrast in the result! Ask a patient the day after extirpation what he thinks of it, and he replies, "I feel no pain whatever, only a little weak"; "I feel as if a load had been taken off me." The pain resided in the inflamed, stretched, and infiltrated integuments, which in thorough extirpation are all removed, leaving only a wound in healthy tissues. The same applies to septic poisoning, which at first is generally quite local and confined to the affected tissues. When these are removed the poisonous focus has gone.

The extirpation of carbuncle by excision and scraping, according to the texture of the affected tissues, is just as rational as the excision of tuberculous glands, the scraping of lupus, and the removal of sloughs, while experience amply proves its value. Among the 12 cases hitherto reported by me, 2 were in women, situated on the face; the rest were in men. In one or two cases the relief to pain was not complete, and this I attribute to insufficient thoroughness in the excision. If the carbuncle be very soft there may be a temptation to rely on thorough scraping alone, and so to leave some of the disease behind. It is advisable to remove all, and to thoroughly cut away with knife or scissors what cannot be scraped.

CASE XIII was quite trivial, situated near the anus in a woman aged 33, and scraped away during an operation for fistula in June, 1896.

CASE XVII was also not serious, in a man aged 52, situated on the cheek, and well scraped and cauterised without anæsthetic in July, 1898. Both of these healed speedily without pain, but I attach no importance to the extirpation beyond the saving of time and convenience to the patients, which, however, is something.

CASE XIV occurred in a man aged 74, between the shoulders, thoroughly scraped in its main part, and the firm edges dissected away, in December, 1896. He lost all pain, healed kindly, and was well in four weeks.

CASE XVI was a very large carbuncle occupying the whole of the back of the neck in a man aged 70, who came to the infirmary in June, 1898. He was in good health and not seriously inconvenienced by the carbuncle, which he had poulticed for the previous two or three weeks. I informed him that the disease might possibly wear itself out, but that it might easily wear him out in the process; that, under such circumstances a patient, especially at his age, was liable to "drift," and that a time might come when he could not stand an operation even if desired. I therefore advised him to let me cut it out at once, to which he consented, and I operated the same day. When all was done, I had removed the tissues of the back of his neck down to the muscles, leaving a gap the size of a saucer. In a day or two, seeing a couple of diseased spots in the wound, I applied pure carbolic acid, which killed the infection and acted as an anodyne at once. Bright granulations quickly covered the wound, which in a fortnight greatly diminished in size. Large skin grafts, from another patient, sliced off the thigh as in Thiersch's method, but laid direct on the granulations (method of Ollier), were now employed, and all took except at one corner. The patient's health continued well, without any rise of temperature or any inconvenience except some weakness for a day due to the operation. The grafts in this case served the purpose of a protection to the granulations, but did not prevent contraction of the sore, which, however, appears to have been compensated by sliding of the skin from surrounding parts without deformity.

I have one more case (No. xv) to mention, which, unfortunately, proved fatal.

A man, aged 60, had a large carbuncle behind the neck excised on December 9th, 1896. He did apparently well for several weeks without fever or other evident drawback, but I fear there was insufficiently close inspection of the sore, and during the Christmas holidays my attention was drawn to the fact that he was feverish, and that the healing process was not advancing. Under chloroform the diseased surfaces were well scraped on January 9th and again on the 20th. But meanwhile oedema of the eyelid and orbit of one side set in, suggesting that probably thrombosis of the cavernous sinus had occurred. The other side became similarly affected, and he died, exhausted, of pyæmia on January 26th, 1897. At the *post-mortem* examination thrombosis of both cavernous sinuses was found, and a similar condition in the veins leading thereto from the carbuncle.

All this was, in my opinion, preventable, and it was matter of great regret to me that I did not closely watch the progress of this sore during the early days while the patient's health was undisturbed. In some previous cases I had noted incomplete relief from pain owing to insufficiently free removal of diseased tissue, but no further harm had resulted.

The disaster in Case xv impresses forcibly the necessity not only of freely removing all recognisable disease at the operation, but of critically watching the sore to detect any reappearance of the carbuncular process. This was carefully and anxiously done in Case xvi with complete success.

DR. CALMETTE, Director of the Lille Pasteur Institute, has been promoted to be an Officer of the Legion of Honour.