Original Communications.

ON THE TREATMENT OF VARICOSE ULCERS OF THE LEG WITHOUT REST.

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[Read before the Midland Medical Society.]

IN the periodical literature of the day many valuable suggestions are made and read, and then forgotten by the majority of those who read them, and thus, for want of reiteration, are lost to the profession generally, as the authors themselves seldom like to be constantly writing papers enforcing the same fact.

As these papers are read, accident probably leads some of us to apply them; and if those who did so, and found the practices inculcated beneficial, would collect the facts they observe, and publish them on occasions like the present, a great benefit would be conferred on practical medicine and surgery.

In the present paper, I do not propose to enter upon the question of the radical cure of varicose veins, or of the means which have been directed for that purpose. Nor have I any new principle to offer; but I simply wish to show the results of a mode of applying an old principle, which I believe is not generally practised, and which was suggested by Mr. Hunt, in a paper read before the Medical Society of London, and published in the *BRITISH MEDICAL JOURNAL* for Jan. 3, 1857, and designated "On the Treatment of Ulcers of the Leg without Rest."

It will be understood that I am speaking of the varicose ulcer simple; and that specific ulcers will, in addition to the treatment herein advocated, require the therapeutic remedies indicated by the specific nature of the ulcers themselves.

Pressure, I believe, is the agent recognised as essential to the palliative treatment of the varicose veins and ulcers. Whately, Scott, and Baynton, have all agreed on this point of practice, though they have differed a little in the means of carrying it out; and herein, in fact, lies the whole difficulty; for all must know that, however well and carefully the ordinary bandage may be applied, if the patient move about, in a few hours it becomes loose, and all our labour has been in vain; and hence varicose ulcers have become a kind of *opprobrium chirurgicorum*, and patients affected with them are either almost entirely neglected, or sent to the hospitals (to the great horror of the hospital surgeons), and there, by rest in bed, are pretty soon cured.

Assuming, then, that it is conceded that well-applied pressure is "the essential" to the cure of these ulcers, I proceed at once to the object of this communication, the application of the bandage, as suggested by Mr. Hunt.

"Modern surgery," says Mr. Hunt, "is competent to the treatment of ulcerative diseases of the leg. There is, I believe, no essential defect in it; no necessity for anything new. Why, then, is it so notoriously unsuccessful? Mainly, because the application of the bandage is looked upon as a simple and easy operation, which may be safely entrusted to the patient or nurse; whereas I know of few operations in surgery more difficult to perform, or requiring more painstaking practice than the application of a bandage to the human leg in such a manner as that every portion of the limb shall receive equal and abiding support."

He also observes that the extraordinary success attending the practice of Scott and Baynton consisted mainly in their skill in applying the bandage."

"Calico and linen bandages," says Mr. Hunt, "are generally inefficient and often useless. They do not

yield sufficiently to the motions of the limb; consequently, they cut the limb on one edge, and become loose on the other. The elastic cotton bandage sold at the shops is a very stupid affair. The two edges are stitched together, and form a cord, which cuts the leg if the bandage is tightly applied; and if not tightly applied, it is useless. If the ulcer is disinclined to heal, a flannel bandage is essential to its permanent cure. This bandage should be made of moderately fine Welsh flannel, from seven to eight yards long, and exactly two and a half inches wide, and without a joining."

Now, the use of flannel bandages is the gist of all Mr. Hunt's paper, and is the point which I wish specially to bring before the members of the Society. At the Dudley Dispensary, the number of cases of varicose ulcer which are constantly attending is very large; and it was whilst treating a number of them, and feeling how very unsatisfactory the treatment was, that I read Mr. Hunt's paper, and gave his plan a trial; and four years constant experience has enabled me to speak confidently of its importance and advantage. Cases which I had before looked on with horror and dismay, I now found I could manage without difficulty, and with almost a certainty of a speedy cure; and this without confinement, or without the least necessity for the patient's relinquishing his usual occupations.

If the bandage be properly applied, it will remain immovable for an indefinite period. I have repeatedly seen it remain three weeks without the least displacement; the patient, feeling comfortable, had not come up to have it changed for that time.

I do not intend to take up the time of the Society by entering fully upon the different preparations best suited to each form which varicose ulcers may assume. As a general rule, I strap the wound itself with a few strips of soap-plaster; or perhaps dress it with some simple dressing or water-dressing. For all ordinary cases these are amply sufficient; and if the rolling be properly attended to, the ulcer begins to heal in a very few days, as I believe, almost irrespective of the dressing, so long as that be not positively prejudicial. Generally, however, I prefer the soap-plaster.

Mr. Hunt gives elaborate directions for applying the roller, and for padding the hollow under each malleolus; but my experience has not shown me the necessity of this, and in fact every necessary pressure may be attained without it. I first make one turn with the roller round the bottom of the leg, then one under the sole of the foot, over the instep and round the back of the foot (keeping the edge of the roller as low as possible) and then again over the instep, till the lower edge of the bandage passes round the foot at the root of the toes, about two turns round the foot and then spirally up the leg to the knee. If the roller be thus applied it will be found that it will lie quite even, and indeed seems almost naturally to follow the course I have described, and will not require a turn in the roller till it reaches the calf; and by a little practice it may be brought down sufficiently low to afford ample pressure to the fossæ under the ankles.

I now relate a few cases which will prove the efficacy of the treatment.

CASE I. Mary Cochrane, aged 37, married, the mother of four children, a pale anæmic looking woman, applied May 6, 1857, at the Dispensary, with an irritable and very painful ulcer just below the left inner ankle, of the size of a shilling, from varicose veins. She lived four miles and a half from Dudley, near Halesowen, and was a nailer. The ulcer was strapped with soap-plaster, and rolled with a flannel roller. She walked up twice a week to have her ulcer dressed (a distance of nine miles), and frequently stood at the nail-block from 7 A.M. till 9 or 10 P.M. during the treatment; and on June 10th was discharged cured, with a firm cicatrix. The pain soon subsided after the leg was rolled; and her

health visibly improved as the ulcer healed. She took quinine and iron during the treatment.

CASE II. Harriet Beddoes, aged 28, a fine healthy looking woman, applied June 18, 1859, on account of a number of ulcers on the leg, resulting from varicose veins. She had had two children. The varicose veins commenced in her first pregnancy; they inflamed and broke into a wound. The leg became worse after delivery; and at one time she had sixteen wounds on her leg, which had never been cured though she had been under several medical men. Rest in bed seemed to be the only thing which produced any benefit. When she came to the Dispensary she had six angry looking ulcers, the smallest of the size of a shilling, and the largest of the size of the palm of the hand, on the leg. The leg altogether had such a formidable appearance, that I told her I feared I should not be able to do her much good, I recommended her to try to get into the hospital; but to this she objected. She lived at Well Heath, five miles from Dudley, and was brought up in a trap, as she was quite unable to walk or move about much. The wound was strapped with soap plaister and rolled with a flannel bandage; and she had some sarsaparilla to take. On the 22nd, she walked up to have her leg dressed and back (ten miles), and said she felt very much better. The aspect of the wounds had entirely changed and cicatrisation had commenced.

July 2. Four of the wounds were well; and the largest left was not so large as a florin, and was cicatrising quickly. She was free from pain and did not confine herself at all, walking about and acting as though she had not any wound.

July 6. The wound was quite well; her health was much improved. She had walked up regularly to be dressed. The cure occupied eighteen days.

CASE III. Sarah Hardwick, aged 34, came under my care July 13, 1857. She had had six children. She had an angry granular ulcer, larger than the palm of the hand, with hard raised edges; it was intensely painful, preventing sleep and seriously impairing her health. Varicose veins appeared in her first pregnancy; and a wound in her second. It healed after her confinement; till five years ago, since which it had not healed. There were large varicose veins all over the leg. The leg was strapped and rolled as usual. After the first dressing the pain was much relieved, and she told me that when she woke the first morning she exclaimed, "Thank God, I have had one good night's rest again."

Aug. 10. The wound was nearly well; her health was much improved. She was not like the same woman. The wound had been dressed twice a week.

Aug. 17. The wound was well. She was ordered to have a laced stocking. She walked six miles each time her leg was dressed, had no restraint put on her. The cure occupied about five weeks.

CASE IV. Michael Gragby, aged 50, was admitted May 30, 1860. He was a remarkably fine tall man, gardener to the Earl of Dudley, residing at Green's Forge, six miles from Dudley, and two miles from his work. A large varicose ulcer, four inches by three, was present on the internal aspect of the left leg; it was deep, covered with an ash-coloured secretion, and surrounded by elevated granular edges; it was very painful, and gave off an ichorous discharge. The leg was covered with varicose veins from the toes to the instep on the internal surface; and often ramified on the external aspect. He said his health was much impaired by the pain and irritation from the wound. The ulcer was of thirty-four years duration, and arose from a kick at football. It had only been healed once since, and that was in 1830, though he had undergone much treatment at St. Bartholomew's, the Middlesex, St. George's, the General Hospital at Birmingham, and at Stafford, besides other places, where he had been under treatment. It was not strapped in London. At Stafford

it was, without benefit. At Birmingham he obtained much relief, but left before it was well. He was kept in bed the whole time he was in each of the hospitals.

The leg was strapped with soap plaister and rolled. He took sarsaparilla and iodide of potassium three times a day, and opium night and morning.

July 27. The leg had been regularly strapped and rolled twice a week. He had followed his employment regularly, and walked up to be dressed six miles here and six back. There had been progressive improvement and the wound was nearly well. It had never been so near well since 1830.

Aug. 15. The wound was quite well. His health was improved. He was ordered to have a laced stocking.

REMARKS. I have selected the four cases related from a number recorded, on account of the extent and long duration of the ulcers and the exertions which the patients had to undergo during treatment, to show that the most aggravated cases of varicose ulcer are susceptible of cure *without rest* when ordinary means had failed to give much relief—even, in two of the cases, with rest.

In the first case, the patient walked nine miles each time she had her leg dressed, and during the whole time stood at the block nailing many hours a day. The case occupied just over a month. "The pain soon subsided after the leg was rolled, and her health rapidly improved."

In the second case, six angry ulcers, the smallest of the size of a shilling, the largest of the palm of the hand, were cured in eighteen days. The patient walking ten miles each time she was dressed, and following her usual domestic avocations the whole time. This case was so bad that I despaired of curing it, and advised her to go to the hospital.

In the third case, an angry granular ulcer, larger than the palm of the hand, with indurated raised edges, yielded to treatment in five weeks. The patient walked five miles each time she was dressed. The ulcer had been open five years.

The fourth case may be regarded as the *experimentum crucis*. A large varicose ulcer, four inches by three, deep, covered with an ash-coloured secretion, surrounded by elevated granular edges, very painful, and throwing off an ichorous discharge, and which had existed thirty years, in spite of residence in some of the first hospitals in the kingdom, was perfectly cured in eleven weeks. The patient walked twelve miles each time he was dressed, and four every day to and from his work, and followed his occupation as gardener throughout the treatment.

It is quite unnecessary to make any further observations on the subject; the cases recorded either prove my case, or they prove nothing. As I said before, I have no new principle to promulgate and nothing original to offer; all I desired was to show what appears to me to be the remarkable efficacy of the flannel bandage, as proposed by Mr. Hunt, and which my experience fully justifies me in doing. The advantages of flannel over calico for the bandage are, that it is sufficiently elastic to give uniform support, and sufficiently rough on the surface to prevent it from slipping and getting displaced; and, as I have said before, I have known the roller when well applied remain three weeks without moving, the patient having neglected to attend during that period. There is one caution I give to the patient; and that is, to sleep with a thin stocking over the roller, as otherwise it gets kicked off in bed.

Early in the present year, I became accidentally acquainted with a material called "domette," which appeared to me to have some advantage over flannel, and experience has proved this to be the case. It is much lighter than flannel; it is equally tenacious, if I may use the expression; it is sufficiently strong and elastic for the purpose; and, what is of some consequence, it is about a quarter the price. The same material has been

recommended by Mr. Startin for the treatment of varicose ulcers; but I had used it before I was acquainted with his paper. Patients complain of the heat of the flannel rollers, but they gladly bear it in consequence of the great relief they soon obtain from its use. Domette partly obviates this objection. I have one other observation to make: the roller must be accurately made, and in one piece. I get eight yards of domette, and have it washed. I then cut my rollers myself, measuring the width of each accurately with a rule. They should be two and a half inches wide.

CASES OF PERFORATING ULCER OF STOMACH AND OF INTESTINE: WITH REMARKS.

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[Read at the Midland Medical Association.]

So many questions of interest arise on the subject of chronic perforating ulcer, that it would be difficult, without some comprehensiveness, to deal with even the more prominent of them. I shall select a few only of these points for observation, and especially in relation with the following cases, which I will first relate.

CASE I. Perforating Ulcer of the Ileum in a Young and Robust Man: Rapid Sinking and Death: Post Mortem Examination. Mr. B. P., a young florid man, aged 27, in good circumstances, and one of the healthiest looking men I have ever seen, of perfectly temperate habits, had never been troubled with ill health to any marked extent. On one occasion, about twelve months previous to the last attack, he was affected with a somewhat obstinate diarrhoea; which, however, did not in any way incapacitate him for business. This attack must have lasted ten days or a fortnight, and since that period he applied to me on account of a second attack, which yielded soon to remedies.

On December 27th, 1858, having been called to visit him, I made the following note:—"Some shivering; slight heat of skin; he is sitting up in the house, and has been slightly unwell for a day or two. The tongue is furred, white; he has passed a little blood by stool, and feels rather sick at times. The pulse is somewhat feeble. There are nervous tremors, and some agitation." He was treated by salines and five grain doses of carbonate of ammonia.

Dec. 29th. He was not quite so well, and had vomited a little. He complained of no pain.

Dec. 30th. He was in bed with a brown and dry tongue. The pulse was small and about 120. He complained of occasional pain of the abdomen. The bowels had been twice freely opened. The abdomen being carefully examined, there was found in one spot on the right, about five inches from and nearly opposite to the umbilicus, a little tenderness. There was slight tenderness also on the left side of the abdomen. No tympanitis was present. One grain of opium and a grain and a half of calomel were given at bed-time; and a simple saline mixture, of acetate of ammonia and nitric ether, every four hours. A small quantity of sherry and water was ordered to be given occasionally.

Dec. 31st. The abdominal tenderness had all disappeared. The flat hand pressed well upon the abdomen rather gave a feeling of relief than pain. He was quite easy, and complained of no pain whatever. The tongue was very brown, very dry, and cracked across in several places. He had had three free motions since the last evening, which had not been saved. Pulse very tremulous, and about 140. The general signs of typhoid sinking were intensely marked and urgent. He was ordered to take five grain doses of sesquicarbonate of ammonia every two hours; and egg-flip pretty strong every four hours; with beef-tea in the intervals.

Jan. 1st, 1859, 11 A.M. The whole of the symptoms had deepened. The tongue might be a little moist in comparison with the previous day, but the sinking was more marked. The countenance was intensely modified by the lowered condition of the vital powers; the features being sunken and contracted into the true *facies Hippocratica*. The pulse was tremulous and exceedingly rapid. There was no purging. He was ordered to continue the brandy and eggs every two hours.

8 P.M. There was no improvement. For a few moments occasionally there was excruciating pain in the bowels. Half a grain of opium was given to soothe the pain. This had the desired effect.

Death took place at 12 P.M., after one hour's sleep. He awoke up apparently free from pain, turned over, and in a few minutes expired.

This case not only gave me intense uneasiness from its result and other circumstances and relations, but it was in very truth a great puzzle to me. The brother, shocked at a result so unexpected in such a healthy subject, called upon me for my opinion as to the cause of death. Of course, I was in fact unable positively to state this; but I had carefully thought over the case, and, guided by the recollection of slight tenderness in one spot in the early period of the case, a little but stubborn diarrhoea some months before, and by the few attacks of agonising pain three or four hours before death, I suggested the possibility of perforation of the intestine; or else of some other unascertained but equally grave condition. My request for an examination of the body was at once complied with.

POST MORTEM EXAMINATION thirty-six hours after death. The body was firm, well nourished, and fat. There was some blood oozing from the nostrils; and, by the stains and wet, several ounces might have thus escaped. The abdomen when cut into, showed an inch and a half of fat in thickness. The moment the knife entered the peritoneal cavity, blood flowed out freely. Many of the intestines were darkened by blood in their interior. There was no sign of peritoneal inflammation; no lymph; and no gluing together of intestines; but the peritoneal cavity contained fully half a pint, possibly nearer a pint, of blood. Moreover, nearly the whole of the intestines, from the stomach were partly filled with dark blood. On carefully lifting the small intestines from their position on the right side, corresponding with the spot at which some tenderness was noted at the early part of the progress of the case, several days before death, some fluid blood and a small clot were seen to escape. The intestine was then tied, and a careful search was made; when an ulcerated, rounded, and somewhat jagged and blood-stained opening of three-fourths of an inch in diameter, was seen in the ileum, very near to the cæcum, this last being filled with clotted blood, some of which had escaped when the intestines were previously lifted from their position.

I need hardly remark how thoroughly the results of this examination were calculated to set at rest the anxieties consequent upon so unlooked for an issue as this case presented; and how amply and fully every grave feature and symptom was accounted for in the appearances after death. The early and fearful sinking would no doubt be attributable to the great loss of blood from internal hemorrhage, combined also with the depressing effect upon the nervous system of a fatal lesion, while not until some four hours previous to death was there present any of that agony and intense suffering which we look for when the contents of the alimentary canal escape into the peritoneal cavity. The supervention of this pain in short but acute paroxysms, no doubt marked the period of *actual escape*, perhaps of *successive escapes* of blood and other matters from the intestinal cavity through the opening.

[To be continued.]