Clinical Lecture

ON THE

OBLITERATION OF VARICOSE VEINS.

BY

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[Concluded from p. 89.]

WHEN a ligature is applied to an artery, the inner non-vascular coats are divided, and the vascular external coat is brought into contact from the opposite side. The union that follows is produced by lymph effused from the cellular coat, which lymph becomes organised and permanently seals the vessel. When a ligature is applied to a vein, on the other hand, the internal coat is not divided; and as this membrane will not secrete lymph, the only bond of union between the opposed sides of the vessel is fibrine deposited from the blood. By the time that a ligature has ulcerated its way through a vein, cell-development may have commenced in this fibrine; and, if it become softened, there is nothing to prevent its entrance into the general circulation. In the operation which I have advocated and performed now for several years, the veins are effectually closed, so as to prevent hæmorrhage on the one hand, and the absorption of any morbid products on the other. The adhesive action, or union by first intention, begins at once; the process is not interfered with by bleeding; and no ulceration or supuration need occur.

As the lining membrane of veins cannot be made to adhere, the vessels intended to be obliterated are completely divided, so as to allow the surrounding vascular parts to furnish material for that permanent and vascular obstruction which the lining membrane of the veins cannot produce. The pressure made by the needles placed above and below the divided part prevents any hæmorrhage at the time of the operation, and the veins between the two needles are left empty, and their divided extremities are probably separated to a certain extent.

In two or three days, the interval becomes filled with organised lymph, and the vessels are permanently sealed. Until this is accomplished, any absorption through the veins is effectually prevented by the pressure of the needles.

That the serious results to which I have alluded in the first part of this lecture, really depend upon the passage of diseased secretions through the veins; and that pressure upon the vein in the mode which I have described will prevent such absorption, is illustrated by the following case.

William Kintleton, aged 38, was admitted into St. George's Hospital on September 23rd, 1863, for hæmorrhage from the internal saphena vein, which had given way at the junction of the middle and lower third of the thigh. The parts around the opening in the vein were much thickened, in consequence of which the course of the vein could not be clearly distinguished.

On September 24th, an attempt was made to pass two needles under the vein, at three-quarters of an inch apart, and to divide the vein subcutaneously between the needles. Some blood escaped through the punctures made by the needles; and from the great

thickening of the parts, it could not be ascertained that the intended operation had been satisfactorily accomplished. A considerable amount of local inflammation followed the operation, and the skin over the needles showed a disposition to slough.

On the 28th, the needles were removed, and some blood flowed from the apertures. From this it became evident that one or more veins had been punctured by the needles.

On the 30th, two distinct and severe rigors occurred. The pulse rose to 146, and the inflammation was extending from the seat of the operation up the thigh in the course of the saphena vein.

Mr. Pick, the house-surgeon, now sent me an account of the state of the patient; and, conceiving that no time was to be lost, I went to the hospital the same afternoon, and having selected a portion of the saphena vein above the inflamed part, and which was not involved in any surrounding thickening, I passed a needle fairly under the vessel, and made pressure on it by a figure-of-8 ligature passed over the ends of the needle. The part thus compressed was about four inches above the point at which the former operation had been performed.

On the following day, the pulse had sunk to 100. The local inflammation had increased; but all the constitutional symptoms were improved in a marked degree.

Oct. 2nd. Pulse 92. In the course of the saphena vein, about two inches below the insertion of the last needle, the skin presented a bright red patch, the colour gradually fading, towards the circumference, to that of the surrounding skin.

Oct. 3rd. An abscess had formed in the situation of the red patch which appeared yesterday.

Oct. 4th. The abscess burst.

Oct. 5th. A second abscess was forming in the course of the saphena vein, above the insertion of the last needle, which was allowed to remain. Pulse 92. Tongue slightly furred. He had no appetite; slept tolerably well. There was a slight herpetic eruption upon the upper lip.

Oct. 8th. The upper abscess was opened.

Oct. 13th. Pulse 100, soft, compressible. He felt quite comfortable; had slept well. His countenance was free from anxiety.

Oct. 17th. The needle was removed.

Oct. 24th. Pulse 104. Tongue clean. He had a good appetite, and had slept well.

This patient was kept in the hospital to see if any further symptoms would present themselves; but none having occurred, he was discharged well on November 5th.

Another case, almost exactly similar to the above, occurred in St. George's Hospital in the beginning of the year 1862. In that instance, the saphena vein was accidentally punctured during an operation for varicose veins. Severe constitutional symptoms followed; but were arrested as soon as the vein was properly compressed by a fresh needle inserted between the seat of the local mischief and the centre of the circulation. The patient's name was John Brood. He was admitted into the hospital on Jan. 8th, and discharged on the 25th of the same month.

A third case has lately presented itself, where the disease in the vein arose from another cause, and in which the same mode of treatment appeared to have been very beneficial.

Ellen Jackson, aged 39, was admitted into St. George's Hospital on October 14th, 1863, with an ill-conditioned ulcer on the lower part of the right leg. The saphena vein, from this part to the groin, was

distended with coagula. The vessel could be seen and felt throughout its whole course. To the touch it felt knotted and cord-like. When about three months pregnant, the vein had burst. She had been confined seven weeks before her admission. She stated that the series of knots had appeared in the course of the vein about three weeks ago, and that the vein again burst at that time in the situation of the present ulcer.

Upon her admission, both legs were oedematous; and there was apparently some fluid in the peritoneal cavity.

Oct. 16th. She had slept well. Her appetite was good. The urine was very dark-coloured, containing albumen, blood-globules, and a few casts. She had a cough, which had come on the previous afternoon; she was hoarse, complaining at the same time of pain in breathing.

Oct. 17th. At 10 P.M. last night she had a kind of fit. At 4 A.M. this morning she was quite insensible, and was reported to be dying. The breathing was laboured and short. There were twitchings of the muscles of the arms and chest at each inspiration. The muscles of the lips had lost their tone, and flapped to and fro with each breath. There appeared much congestion about the head. The swelling of the right leg had greatly subsided, and the saphena vein was not nearly so much distended.

Oct. 18th. She had partially regained her consciousness.

Oct. 19th. She was much better and quite conscious. She said that she did not recollect coming into the hospital. There was cough and pain in the chest and diarrhoea. The urine now was free from blood, and contained only a trace of albumen.

From the sudden accession of the symptoms at the time when the distension of the saphena vein and the swelling of the leg subsided, I regarded this case as one in which the blood had been poisoned by a portion of the previously stagnant contents of the vein having been poured into the general circulation. The simultaneous affection of the head, chest, and abdominal organs, appeared to confirm this view; and in order to prevent the remaining contents of the saphena vein from passing in quantity and suddenly into the circulation, I passed a needle under the upper part of the vessel, and compressed the vein by a figure-of-8 ligature passed over its extremities.

Oct. 20th. She had slept well. The urine again contained much blood. She was ordered fifteen grains of the phosphite of lime three times a day.

Oct. 22nd. The urine still contained blood. The pain and oppression about the chest continued. The needle which had produced a considerable amount of thickening and inflammation around that part of the vein under which it had been placed, was now removed.

Oct. 24th. There was some increase of the inflammation in the thigh where the needle was inserted. The pulse had again risen, and she complained of pain in the head. She had a cold sensation, but no rigor.

Oct. 27th. The skin was dry; the pulse quick; and tongue furred. She had a slight shivering this morning.

Oct. 31st. She complained of great oppression in the head. The urine now again contained no blood, and only a trace of albumen and a few casts.

Nov. 2nd. She had much improved, and was sitting up in bed.

Nov. 9th. The urine again contained some blood. She complained of pain in the head and loins.

Nov. 10th. The pain in the loins continued. There was also pain on breathing, especially at night.

Nov. 12th. She complained of a sensation of singing in the ears. There was still a small quantity of blood in the water.

Nov. 16th. She got up yesterday. There was still some oppression in the head, and a sense of throbbing over the right temple, pain in the loins, and a feeling of sickness.

Nov. 17th. She left the hospital of her own accord.

The favourable result in this case, in which the transmission of morbid matter to the central circulatory organs was apparently checked, may be contrasted with much interest with the following case, in which there were no means of preventing the continued flow of the diseased secretion into the circulation. The cerebral symptoms in the two cases will also admit of an interesting comparison.

William Stubbs, aged 30, of a swarthy complexion and emaciated appearance, was admitted into St. George's Hospital, December 25th, 1844. A year previously, he had suffered from pain in the head, and nausea. Three months before his admission, the pain in the head had become very severe, and was accompanied by frequent rigors, occasional vomiting, pain in the epigastrium and region of the heart. The throbbing pain in the head was occasionally so severe, that he would frequently say that "all the disease was in the head".

He continued in the same state, with occasional rigors, till the 31st, when he vomited incessantly.

A soft pulpy tumour on the neck now attracted attention, which, he said, had existed since the beginning of October, when the previous symptoms had become so much aggravated. It was of the size of a small walnut, situated immediately over the carotid artery; pulsating, but not expanding with impulse. He sank into a semicomatose state, and died on January 9th, 1845.

This tumour, upon examination by Mr. P. Hewett, was found to be a small, perfectly circumscribed abscess, bounded on all sides by condensed cellular tissue. It contained a darkish coloured pus, and corresponded to the middle of the jugular vein. The cavity of the abscess here communicated with the vein by an opening of the size of a pea; and a probe could be passed through the opening into the cavity of the vessel. When first examined, the opening was partly blocked up by a thin coagulum. The internal coat of the vein presented its usual smooth and polished surface, and was but slightly discoloured, except in the neighbourhood of the opening. Here it was somewhat injected, and presented some yellow spots, apparently of pus, on the surface of the inner membrane. The outer covering of the vein was in this situation thickened and partially destroyed; the vein itself contained no blood. A very small loose clot, presenting anything but the appearance of blood, was found in the right auricle. It was of a brown rusty colour, mixed with streaks of a yellow hue. Examined by the microscope by Dr. Bence Jones, it was found to contain a remarkably small quantity of blood-globules; but there existed a great number of large granular cells, the microscopic characters of which did not identify their nature.

It is remarkable in this case, that, although the contents of the abscess must from time to time have partially emptied themselves into the vein, yet, not being detained in it, they excited little or no local irritation.

In concluding this lecture, I may mention that, out of the very considerable number of cases of varicose veins that have been operated upon during

the last two years at this hospital, no constitutional symptoms have in any instance showed themselves, with the two exceptions above mentioned; and that in these the symptoms were completely arrested by acupressure upon the vein, so as to close its canal above the seat of the operation.

Original Communications.

CASE OF EPIGLOTTITIS, OR ACUTE INFLAMMATION AND ENLARGEMENT OF THE EPIGLOTTIS: WITH REMARKS.

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[Read before the Manchester Medical Society, November 4th, 1863.]

I HAVE been induced to present a report of this case to the Society, partly from the rarity of the affection, the great suffering and even danger to life which it involves, and partly on account of the satisfactory result of the treatment which was adopted.

On August 21st, 1863, I was requested early in the morning to visit Thomas Shanley, aged about 35, a warp-sizer by trade. He complained of very great difficulty of deglutition, or rather of a total inability of effecting it. He had very little cough, but occasionally hawked up a little mucous secretion. He had not much feverishness, either as to temperature, thirst, or quickened pulse, the last being 88 in a minute. On inspecting the internal fauces, there was not much appearance of inflammation. The tonsils were only slightly enlarged; but, on passing my finger to ascertain the state of the epiglottis, it was felt to be much enlarged, in the form of a roundish solid ball, apparently filling up the passage from the pharynx to the œsophagus. There was no particular fulness about the external fauces, which had been rubbed with a stimulating liniment, and afterwards poulticed. He had used a gargle of sage-tea and vinegar, and his bowels had been purged by medicine. He had first felt the difficulty of swallowing about two days previously, but had attended to his occupation up to the preceding evening. He could ascribe no cause for his complaint, except, perhaps, taking cold after working amongst steam. I prescribed for him three grains of calomel to be placed upon his tongue every three hours.

He was seen again in the forenoon, and appeared to be much in the same state. This continuing in the afternoon, I then punctured the swollen epiglottis in two or three places with a long needle, broad and flattened towards the extremity, guiding it with one hand, whilst a finger of the other was placed on the part affected. This needle, I may remark, was one which I had used some years previously for passing a seton through an immense bronchocele; and on both occasions it answered the purpose well. I repeated the puncturing late in the evening; and the subsequent bleeding each time, although to no great extent, somewhat relieved him, at least for a time.

August 22nd. He had passed a sleepless night. His power of deglutition was little if any better. In other respects, he was about the same as yesterday. The tumid epiglottis, which presented to the finger, as above remarked, the sensation of a hard smooth ball, was again freely punctured, and bled moderately.

In the evening, he was rather better; had slept awhile during the day; and had been able to swallow a very small quantity of beef-tea. He had now taken five of the calomel powders. The pulse was 88 in the minute; bowels regular; urine scanty, but clear, and not very high coloured; respiration not noisy, nor difficult; and no particular sounds could be heard in the chest.

August 23rd. He passed a tolerably good night, hawking up occasionally some discoloured bloody mucus. He could now speak rather better; his speech previously having been an almost inaudible kind of whisper. He had been able this morning to swallow about half a cupful of tea. The swelling of the epiglottis being still considerable, I punctured it again, which was followed, as before, by some bloody hawking. He still continued to take the calomel powders.

In the evening, I found him down stairs. He had been able during the day to swallow a little egg-milk, some beef-tea, and common tea.

August 24th. He passed a rather restless night, principally from headache. The tongue was covered with a whitish fur; his breath exhaled a foetid odour; and his gums were a little tender. The bowels were regular, but he had no appetite. Deglutition was still painful and difficult. He frequently hawked up some discoloured mucus. The swelling of the epiglottis being still considerable, I again punctured it, which was followed, as usual, by some bloody discharge and sensible relief. He was ordered to omit the calomel powders, and to take every two or three hours one tablespoonful of a simple saline mixture.

August 25th. He passed a rather uneasy night; but was not worse, although his swallowing was still much obstructed by the enlarged epiglottis. Pulse about 88; bowels regular; tongue less furred; and breath less foetid. The breathing was easy; the percussion-sound over the chest and the respiratory murmur were natural. At his own request, the puncturing was repeated. The saline mixture was continued.

August 26th. He was in much the same state as he was yesterday. He was prescribed an acidulated weak solution of sulphate of magnesia.

August 27th. He had passed a tolerable night, and seemed decidedly better. Pulse 84. His tongue was cleaner, and the foetor of the breath was scarcely perceived. The bowels were regular. He could now swallow at once a middle-sized cupful of liquid; but he had no appetite for food. He still hawked up frequently some mucus or muco-purulent fluid; and in the night he expectorated a semi-solid substance (probably inspissated mucus), of about the bulk of the last joint of his forefinger. He now articulated audibly, instead of as heretofore, in a sort of whisper. I thought it best to puncture once more the still somewhat enlarged epiglottis, as he had always felt relieved by the bloody discharge following it. The acidulated cathartic mixture was repeated.

August 28th. He was now down stairs dressed, having passed a tolerably good night, only disturbed now and then by the expectoration. His deglutition was better; and, on examining the epiglottis with my finger, I found that its bulk was diminished, and that it was somewhat resuming its flattened form. A little bloody hawking followed this slight digital examination.

August 29th. He was going on favourably, but had no appetite for solid food, living so far chiefly on tea, broth, and egg-milk. I prescribed him the following mixture:—Iodide of potassium, gr. xxv; tincture of orange-peel, tincture of calumba, of each 3ij; water, 3viiss. Two tablespoonfuls to be taken three times a day.

August 30th. The epiglottis was still more reduced