VARICOSE VEINS AND THE SOLDIER.

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In the course of this article it is not my intention to discuss at length the treatment of varicose veins but to bring forward a number of points that have come to my notice while treating fairly large numbers of soldiers for this condition and which I think worthy of consideration.

For various reasons, such as saphenous reflux past an incompetent saphenous valve, failure of previous injection to induce thrombosis, or the presence of a cough impulse, I have thought it necessary to combine injection treatment with ligation of one or more veins in a fairly high percentage of patients. By carefully sorting the cases and by combining ligature with injection it has been possible to discharge many patients in a comparatively short space of time, with what appear to be eminently satisfactory results.

In the twelve weeks ending on April 12, 1941, the time of writing, the average number of cases seen weekly at the Varicose Vein Clinic has been approximately fifteen. It is regretted that owing to enemy action representative figures for the cases treated from last September onwards cannot be given but, in any case, all that is required for my present purpose is to give a rough idea of the numbers under treatment at this hospital.

In spite of the fact that those cases chosen for operation were more severe than the others, almost all of them have been discharged after less than half a dozen injections following ligation with all the main varicosities thrombosed. Frequently one or two injections at weekly intervals below the knee have sufficed. Some of these men had had as many as twenty previous injections at various times in the past, without obvious result.

It is all the more surprising therefore that a small but definite minority of men refuse operation, although prepared to go on apparently indefinitely with injections alone.

I have endeavoured to discover the reasons for refusal of a course of treatment which to the surgeon seems so eminently satisfactory, being simple to perform and of lasting benefit. The reasons for refusal given by the men themselves are broadly speaking as follows:

1. That their mother had varicose veins for years and that nothing could be done for her.
2. That he or a friend had had the operation and that the veins were as bad as, or worse than, before.
3. That the patient was afraid that the operation might ruin his leg for future use.
4. That the patient did not like or want operation, with no reason given.

I should state that the majority of these men seem to be of two types; those
of low grade intelligence and those who are obviously highly nervous and apprehensive. I will endeavour to analyse these replies one by one in the light of my own experience.

Reason 1.—That his mother had varicose veins for years and that nothing could be done for her.

It is well known that large numbers of middle-aged women suffer from varicose veins, and often ulcers, and that they frequently regard such a disability with philosophic calm, disdaining all treatment and decrying the possibility of cure and even sometimes expressing the view that to heal the ulcer and stop the discharge would "drive the poison inwardly."

In the light of all this it is not therefore surprising that some young men, who have had to listen to this kind of thing from their mothers for years, should take a gloomy view of the prospects of cure.

Reason 2.—That he himself or a friend had had the operation and that the veins were as bad as, or worse than, before.

A number of points arise here. In a few cases this is an excuse to avoid operation. In others an operation has been done and has been unsuccessful, in that the hoped-for thrombosis following injection has not taken place, for various reasons. In some cases a saphenous ligation has been done too low, so that subsidiary veins joining the main vessel between the ligature and the entry to the femoral vein have not been blocked. In others the reflux occurs lower down the thigh, or from the popliteal vein, so that the commonly practised ligation of the saphenous vein at its upper end has been too high to be effective.

Careful testing with a rubber band round the thigh at different levels should suffice to prevent this mistake.

This is done by raising the limb and emptying the veins by upward massage, applying the rubber band and then making the patient stand. If the band is above the leakage, the varicose veins below will quickly fill. If not, they should remain empty or at the most fill gradually.

In yet others an attempt to ligate the saphenous vein has been made through an incision placed too far out to find the vessel. In one case this mistake was made on both sides, for operation scars were found nearly 2 inches away from the veins, which could be seen running past them well to the inner side.

The precaution of marking the skin over the vein in the erect posture before operation would have prevented this from happening. If the line of the vessel is not visible, it may often be seen and almost always felt on making the patient cough.

There are some, a most unfortunate group, who have had operative treatment followed by injection, with a first class result from the surgeon's point of view, and who proclaim that their veins have never felt worse.

The explanation for this is, I feel sure, that after a series of unsuccessful injections which have left no residual discomfort whatsoever, an extensive thrombosis has followed ligation and injection, and the patient for the first time has had aching and stiffness, which he very rightly ascribes to operation. This comes as a great shock to an able bodied soldier who has never had a day's pain.
in his life and he will not hesitate to tell his companions about it, and to say what he thinks of operations in general and surgeons in particular. Long afterwards, when the veins have shrivelled away, he will not in many cases think back to the days when they swelled and ached and compare results. But he may still remember with a sense of injury that he had once been foolish enough to allow operations to be done on him and that he had had to pay for it afterwards with days of discomfort. I believe this happens quite frequently and I can only suggest that the patient be fully warned that a successful result will begin by being painful and that he be not sent back to duty too soon.

Reason 3.—Fear that the leg would be injured.

This may occasionally be an excuse to avoid operation, but I believe more often is given for the reason stated above, namely that a friend has had a painful and stiff leg afterwards.

Apart from one injection ulcer, I have never seen any real harm result from either injection alone or from combined injection and ligature in any of these men. I have never seen a soldier in whom the ligature or injection of a superficial vein has been done in the presence of an unspotted deep thrombosis, or in whom the femoral vein has been tied in error. I should expect both of these mistakes to have a serious effect on the future efficiency of the soldier.

It is not known what substance produced the injection ulcer mentioned above, as the patient had had it several weeks when he first attended the Clinic.

Aching, stiffness and tenderness, sometimes lasting as long as a couple of weeks, has followed an extensive thrombosis and many of the men have complained about it. A few isolated cases have felt faint after injection, and one or two who have had extensive thromboses following the combined treatment have felt off colour for a day or so.

Reason 4.—The patient did not like or believe in operations, with no reason given.

In addition to what has been stated above, there may be all kinds of prejudices and complexes of interest to the psychologist. I have more than once referred to an excuse for avoiding operation without suggesting a reason. This is a big question largely of psychological interest, but in addition there are, in my view, a certain number of men who think that varicose veins are not a condition sufficiently serious to warrant such drastic treatment and that injection is the utmost length to which they are prepared to go. They hesitate to say so however to a medical officer who obviously does not agree.

There are also occasional patients who regard their varicose veins as a justification for avoiding heavy duty, for being graded down, or for being boarded out of the Army. With all these problems I will not attempt to deal as they are obviously for individual consideration.

The great majority of injection cases have carried on with their normal duties.

Sodium morrhuate 5 per cent, Burroughs and Wellcome, has been used in almost all the cases, not because of any special preference for this substance but because it was available, and because the risk of injection ulcer from its use is small. The only other preparation used was quinine 11·5 per cent and urethane.
5.75 per cent, British Drug Houses, which was tried in one or two cases in which sodium morrhuate had failed to produce a thrombosis. In no case was it successful. Most of these cases were afterwards treated by ligature and injection of sodium morrhuate with excellent results.

In my opinion operation cases should be kept in hospital for a week, though never in bed, and should not go back to full duty for a further week if an extensive thrombosis has occurred. I think it undesirable to keep operation cases in bed, even immediately after ligature, which is done under local anaesthesia as, by keeping the leg raised, the affected veins more readily empty and will tend to lose the sodium morrhuate. Moreover, I think there is a greater risk of a pulmonary embolus or of an unpleasant general reaction if the sclerosing fluid diffuses too rapidly into the general circulation.

I have endeavoured to bring forward a few points which have caught my attention in dealing with a mild but important defect in the hope that they may be of some interest to other medical officers.

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