

subject, strongly favored this operation; in 1886 Konig reported that he had given up ligature and limited excision, as better results were obtained by more extensive operation; and since these dates the operation has continued to increase in popularity, both in England and America. I, therefore, make no apology in urging excision as the best treatment in well-selected cases calling for so-called radical treatment.

*The operation.* The day before the operation the patient, placed in a sunlit room, is asked to stand upon a chair or table, and the saphenous vein, with all its enlarged branches, is traced throughout its entire course with a camel-hair brush, moistened with a 20-gr. solution of nitrate of silver in spts. eth. nit. A few minutes' exposure to the sun will so fix it that any washing that is done preparatory to the operation will not render it much less distinct. Only those who have removed large pieces of dilated vein will appreciate the amount of comfort and the saving of time which comes through the adoption of this simple precaution. The vessel may in this way be exposed throughout its entire course in less than five minutes with a degree of accuracy and ease not possible in any other way.

That the strictest precautions as to surgical cleanliness must be observed goes without saying.

The limb is cleansed with ether and soap, and for some time before the operation packed in a wet carbolic dressing. The patient being etherized, the limb is rendered bloodless, and a tourniquet applied above the upper limit of the incision; the limb is again washed, a short incision is made some little distance above the length to be removed, and the vein divided here between two ligatures. In this way I have protected the proximal end of the vein against any possible infection which might find its way into the larger wound. So far, this precaution has never been necessary, none of the cases having been infected. A rapid incision is now carried over the entire length of the vein to be excised and down to it.

The skin flaps being well turned back to enable one to follow the altered branches through the fascia and into the muscle, if needs be, are fastened with a few stitches, and the piece of vein to be removed is divided at its upper end. The dissection proper is then commenced, and this is the tedious part of the operation. The major portion of the work may be done with the back of the knife, or a fine periosteal elevator, the branches encountered traced out beyond all appearance of disease, and tied off with strings or catgut (preferably that boiled in alcohol under pressure). Unless considerable care be exercised many of the smaller branches will be torn, and some troublesome bleeding may result. That I might feel satisfied that my catgut was absolutely safe, I had Tiemanns