

Step 5.—The superficial tissues are closed by routine methods, and a small dry dressing is applied.

Step 6.—Care must be taken to provide suspension of the testicles in order to prevent the postoperative swelling and the subsequent induration of the scrotal end of the cord.

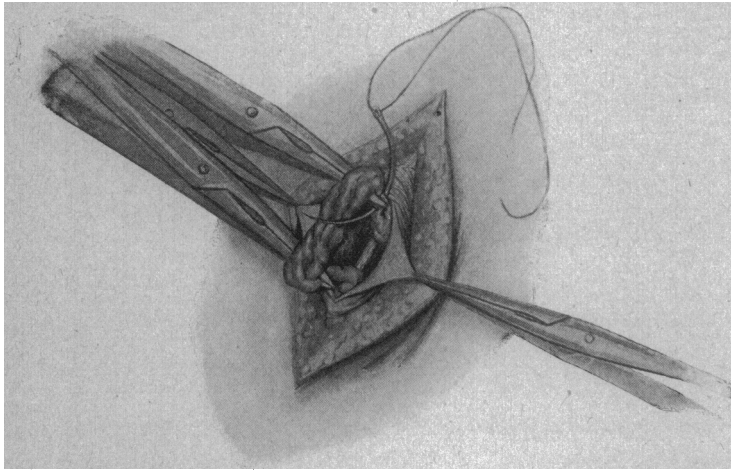


Fig. 4.—Raising up spermatic veins, disclosing vas lying in bottom of wound.

COMMENT

No priority is claimed for this method. An excellent description of a similar operation is found in Taylor's "Operative Surgery." Very few textbooks pay much attention to the cosmetics of varicocele or to the details of this simple operation.

There is no necessity for subjecting the vas and its accompanying vessels to trauma, yet most operative methods include as a step the lifting of the cord from its bed. This greatly increases the postoperative induration. Induration should be a rare sequela. In this method the tissues are subjected to a minimum of trauma. I have followed the principle of this method for a number of years in operating aboard ship for varicocele under local anesthesia without distress to

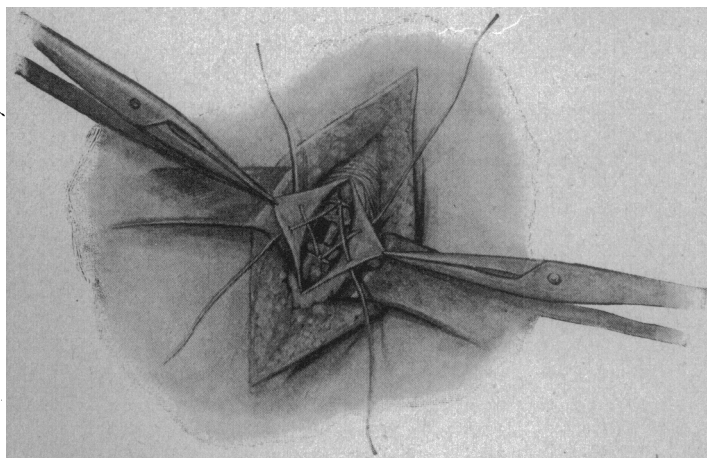


Fig. 5.—Manner of passing ligatures used to tie spermatic veins for closing cord covering.

the patient. Handling the vas is liable to be painful and makes complete anesthesia difficult.

The spermatic artery is excised with the spermatic veins, no attempt being made to separate it. Bevan¹ satisfied himself by a review of his own varicocele work, and by a review of experimental work on dogs

to determine the blood supply of the tests, that there were two distinct and separate sources of blood supply for the testicles, namely, the spermatic vessels, and the other vessels accompanying the vas, either of which were quite sufficient to maintain the nutrition and the function of the organ.

I am indebted to G. V. Schwarz, the artist at Naval Hospital, Philadelphia, for the excellent illustrations of the operative steps.

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HOSPITAL STANDARDIZATION

WITH ESPECIAL REFERENCE TO MEDICAL EDUCATIONAL WORK IN HOSPITALS *

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There are few social institutions progressing and changing so rapidly as hospitals. At the present time, therefore, "standardization," in the sense in which that word is usually used, which would mean the deter-

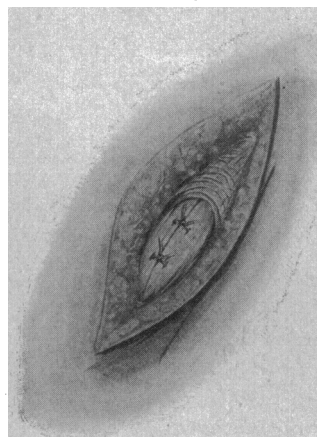


Fig. 6.—Closure of wound by tying of two sutures, as described in article by Dr. Angwin.

mination and use of types of institutions and types of work generally accepted as best, is clearly impossible. Types would be out of date long before they could become established. On the other hand, progress and enthusiasm have made many dissatisfied with conditions which are as yet quite general, and which should unquestionably be replaced by better methods. To those who have thought most about the problem, "hospital standardization" includes the setting of minimum

standards; but this only as a minor feature. The majors are the development of the institution to meet more effectively and more efficiently in every way occasions for work from the front door to the ash pile. In this sense the word "standardization" will hereinafter be used. The hospital is a more complex institution than is commonly understood by trustees, managers and department workers, including the medical staffs. In fact, it is often a question if they have not become too complex to be managed successfully by superintendents now available. It is unusual for men to develop real interest in so many and so different human activities as a modern hospital must include.

MULTIPLE FUNCTIONS OF HOSPITALS

It was not long ago that hospitals were merely institutions for the care of the ill, for the physicians. Then hospitals assumed the responsibility for educating and training professional nurses. We are more or less familiar with the expansion of hospitals as social institutions, not only in the development of the work generally called "social service" work, but also

* Read at the Fifteenth Annual Conference of the Council on Medical Education of the American Medical Association, Chicago, March 3, 1919.

1. Bevan: Surgical Clinics, p. 1103 (Dec.) 1918.

in the work of the institutions in the broad general development of sociological progress. The words "reconstruction work" have come to have concrete meaning. There is today the responsibility to utilize to advantage the convalescent patient's idle time, in educational, Americanization or occupational study. There exists a responsibility to the patient's home and family. The various sociological institutions of an organized community are now holding hospitals strictly responsible for a cooperation in work and for a consideration and service to patients other than medical. There has also come the demand on hospitals to train and develop various types of technical workers, so that many hospitals now have definite courses of instruction for this purpose. This list includes institutional dietitians, anesthetists, technical laboratory workers, nurse maids for children, and a few others. The dispensaries (or outpatient departments) of hospitals were called such because the first institutions dispensed drugs on prescription to the worthy poor. The present diagnostic treatment and educational functions of dispensaries are late developments. Until very recently, outpatient service was confined strictly to the same worthy poor. Of late, however, the evening pay clinics have been developed which extend this service, particularly in the specialties, to the working man of small income. The present policy of the government in regard to venereal disease will necessarily write a new chapter in the development of dispensary work.

The standardization of a hospital means the standardization, development and balancing of all these activities; one measure cannot be applied to all. Certain limited groups, as the American College of Surgeons, limited in the sense that their part in the work of a hospital is limited, have become deeply interested in the problem and have, I believe, quite unfortunately called this ambition and the efforts to better conditions "hospital standardization." There have been corresponding ambitions in various other groups of hospital workers, as the nurses, the dietitians and social service workers, as well as other groups in the medical profession. It is obvious that the work of these various groups, which have no contact or common ground outside of the institution, should somehow be correlated, harmonized and utilized to the advancement of hospitals and hospital work. Some disinterested and impartial agency or organized group of agencies should be developed to accomplish this task, and to round out hospitals to meet better the needs of the various communities. In doing this, it is likely that hospitals will be divided into various types to meet the various needs; and then, as these various types become clearly and generally recognized, the practitioner and the public will not be misled as to the kind of service a given institution can be expected to render. All this is a tremendous task. Who should do it? It has seemed to many an established principle that it would be unwise for any department to attempt to standardize the whole. There are some who would adhere to this principle so closely as to feel the impossibility of establishing a standardization in medical departments, pathologic departments or laboratory departments which was developed by, or generally believed to be developed through, representatives of the surgical department. The nursing departments, the social service departments and others would not for valid reasons readily accept the standardization

worked out by a medical department, or all the medical departments combined. If the task were a matter of simple standardization in the ordinary meaning of the word, an independent foundation or commission might undertake it; but the problem is too great and too varied, the ideals too indefinite, and progress too rapid to permit this. The agitation of any group, however, for minimum standards, for classification of work and for development will easily accomplish results more than justifying the effort, especially if a way can be developed to put into operation with some expediency the unquestioned recommendations for good.

As long as the American Hospital Association was simply a voluntary association of hospital administrators, little could be accomplished through this organization. At present, however, the American Hospital Association is in the process of transition to an association of hospitals as the constituent members comparable in every way to the national associations of various trades and industries. As soon as this transition is completed, this association will have the attention of hospital trustees and managers who are keenly alive to the advantages of a national association in any industry, and there will be established an organization which can theoretically at least put into effect by the pressure of influence and public opinion, if not by law, various reforms leading to more rapid advancement in minimum standards. It is the opinion of some also that through this association there can be worked out a classification or typing of hospitals, so that the type and the work in a given institution is fixed by minimum standards and is known to all. It is principally in the interest of the public and humanity in general that these changes should be brought about, yet this in no way lessens the benefits to the medical profession, or to other groups of workers or to the institutions themselves.

All efforts toward hospital standardization have a positive and direct effect on medical education, which is the topic of especial interest to this meeting and which must be standardized with the rest of the institution.

A frank discussion of medical education, as carried on by the hospital, strictly from the standpoint of hospital aims and strictly in the interest of hospital development, may help in the determination of common ground and in the standardization of this work. This paper represents such a discussion, so far as I am entitled and competent to write it.

RESPONSIBILITIES OF HOSPITALS

The modern hospital has direct responsibilities in the education of undergraduate medical students. Here, and here only, is clinical material collected together and combined with facilities for this work. It is probable that only a comparatively few hospitals will ever be called on to provide facilities of this sort, and few hospitals other than university hospitals can be used to advantage in this work. It is, however, clearly the duty of the institution which can be helpful in this way to accept this duty and carry on such activity. These hospitals do now and will in the future more sharply comprise one definite type.

In the last few years there has been a tendency to reduce greatly the amount of didactic instruction in the fourth year and to assign these students to ward work in hospitals. At Lakeside such students are called clinical clerks. They do not lodge in the institu-

tion, but spend practically the entire day on the wards at this work. It is unquestionably more effective to teach clinical medicine at the bedside, and the fourth year students may well be taught largely by this method; yet in order to carry this out satisfactorily there is the necessity of a sufficient number of class hours, ward walks, etc., to make the experience to these students in work comparable to intern experience extremely limited. The visiting physician or surgeon does not find them at all times available. The tendency, therefore, is to organize and carry on the routine work without them. They remain students only. The greatest value of such a system has been its service in establishing its own defects. It has demonstrated, first, that fourth year medical students are not yet in a position to secure maximum advantages from internship work. It has demonstrated the value of and need for more bedside instruction in order to develop an advanced generation of physicians. It has brought out the need for a required fifth year to be spent by all students strictly as interns on a general rotating service. This will permit further development in the fourth year instruction along lines of clinical pathology, ward walks, etc. After the fifth year spent as intern in general or rotating work, the student is prepared to undertake special work. It is my opinion, based on observation of the results at Lakeside, that it is unfortunate for fourth year medical graduates to go directly into special services, even to services limited to general medicine or general surgery. There is apparently more loss than gain, and until the fifth year is established it seems better that internships should invariably be general or rotating. This program of a fifth year will bring distinct betterment in hospital work, and hospitals are therefore interested in its adoption.

On the other hand, graduate medical instruction in some forms and to certain degrees is possible in every hospital and should be carried on to the maximum extent. Every hospital has this opportunity, and its responsibilities to society are not properly discharged until it does its best, at least in the matter of advancing the professional attainments of its staff and such other physicians as work in the institution. It may be that a hospital may not feel that it owes anything to its staff or to the medical profession as a whole. It may feel that the financial advantages to the staff are greatly in excess of the return by the staff to the institution, and this may be true; but this in no way discharges the responsibility of the institution to the future sick and to society to advance the medical skill of these men as far as possible, and to do this without thought or consideration of the benefit to the physician personally.

Another obligation on hospitals is the training of postgraduate medical students in the form of interns or fifth year students. Like many hospital activities at the present time, the value, excellence and efficiency of this work now varies greatly. The real purpose and justification of this system (better care for the future sick) is not always the controlling factor it should be in the practical working out of the plans. Too often it is considered, on the one hand, as a system to get routine hospital work done cheaply and, on the other, a benefit to the individual intern. There is an immediate value in this system to the intern and to the hospital, but this alone does not justify internships, and the young graduate in medicine certainly

does not owe this service to hospitals. The internship must justify itself as service to medical progress, to better public health, and must be judged solely by this standard. There is the obligation on the medical schools to assume some responsibility in guiding their graduates in the selection of internships to insure maximum development of these graduates.

NUMBER OF HOSPITALS AND GRADUATES

The number of hospitals is increasing rapidly. The number of medical graduates is for the time being decreasing. The trend is such as to make it improbable if ever again the medical schools will produce enough graduates in medicine to provide interns for all, or even a large proportion, of the hospitals of the country. The internship as an essential organization of hospitals is gone, and substitutes for this system must be produced. It is certain that as the disparagement between the number of hospitals and the number of medical graduates increases, the tendency will be for interns to seek the educational opportunities offered by the larger, better equipped and more active hospitals, and quite properly so. A salary connected with an internship will not make good deficiencies in educational opportunities. With this in mind, it has been suggested that there be developed a specially trained nurse who knows something of anesthetics and laboratory work to take over intern work in the smaller, so-called "nonteaching hospitals." Such an arrangement would facilitate the "standardization" of internships for the better, assist positively the demarcation of types of hospitals, and open a new field for nurses. To the patient in the small hospital without well organized visiting staffs, it is a question between the trained nurse responsible actually and directly to the attending physician, and the raw, untrained intern with a new license to practice and a feeling that his first allegiance is to his dignity. Experience would lead some of us to choose the nurse.

If the final decision is what now seems probable, i. e., that the first year after graduation be spent in a general or rotating clinical hospital service, the number of hospitals that can be developed to offer attractive and sound educational opportunities for this year will undoubtedly exceed the number of medical graduates. After this first year of general clinical work, there should exist in a certain number of hospitals opportunity for specialization and opportunities wherein a student may spend from one to five years additional in special training either in general surgery, general medicine, or in any of the specialties. Only a limited number of hospitals will be able to carry on work of this nature. This number will be greatly increased over the number now engaged in this work by the general and lay recognition of the simple and accepted principle that surgery or any other specialty can be developed to higher skill by several years' residence in a hospital offering adequate facilities than by the more usual method of working into the specialty from general practice. If this is recognized by hospital trustees, the assuming of the obligation to develop future specialists by this method is assured. In order to accomplish this it may be necessary that at least the latter years of this training be based on fellowships that provide living expense; but the education of the general public in the value of this work will promptly produce the necessary funds, as it is unquestionably a wise investment for the philanthropic.