

cised. In this way all the hæmorrhoidal tumors were ligated and the mass was then returned within the sphincter. This was the favorite operation of the late Dr. Van Buren and his followers, and had at present in Mr. Allingham, the famous English surgeon, its most distinguished advocate. The use of the ligature, applied to cause necrosis of tissue and then allowed to remain in the wound, was open to the same general objections which had caused its abandonment. When applied in this manner to the constriction of the large vessels, sloughing necessarily supervened, which meant an infected wound, exposing the patient to the same dangers, although, perhaps, of less degree, as infection in any other part of the body.

That this was not hypothetical criticism the writer thought there was abundant proof. The stoutest advocates of the ligature admitted that abscesses, general septic poisoning, and other dangers, as secondary hæmorrhage, were not wanting in the experience of the most careful and practical surgeons. The use of the clamp and cautery came into vogue and had been specially popularized by the distinguished surgeon, Mr. H. Smith, of London. This procedure the author had early adopted in his own work. It had advantages over the ligature in that the primary wound was aseptic. Then by the time that the slough was ready for separation, the subjacent tissues would be fairly well protected by the abundant proliferation of granulating tissue. In his own experience, the suffering caused by the burning was objectionable, while all wounds caused by burning were invariably slow of repair. He was of the opinion that the results obtained from the use of the cautery were generally of a more satisfactory character than from the ligature. Secondary hæmorrhages were reported to have occurred, and it was claimed that contraction was not uncommon after cauterization. It might be accepted as a fact that the use of the cautery, except in certain conditions in uterine cancer, had been relegated to the past. Even here it found fewer advocates than formerly. Certainly bleeding was to be controlled without its use, and it might be questioned whether deep burning was safer than deep cutting in any disease. Then various crushing instruments had been devised, to be used, however, with or without the ligature, for the purpose of producing more rapid necrosis of the tissue involved. The advantage alleged for the operation of crushing was an avoidance of hæmorrhage, but, on the other hand, some operators reported that hæmorrhage had followed crushing. Theoretically this method seemed to offer little, if any, advantage over the ligature, therefore he had discarded it without trial. There remained something to be said of the cure of hæmorrhoids by the chemical action of certain medicaments injected into the parts. Few of the modern methods had received

more speedy attention than this, the so-called "carbolic acid treatment of piles." It had much to warrant its acceptance. Carbolic acid of itself was at that time believed to be the chief of antiseptics, rapidly coagulating the blood and the albuminoids. It had been variously combined with morphine, cocaine, etc., and little pain had followed its use, and patients and physicians had been alike enthusiastic. At present, however, it appeared that the consensus of surgical opinion was that the result was in a large degree disappointing. When a considerable proportion of acid was used, causing necrosis of tissue, no matter how carefully injected, the tissues not infrequently which it was desirable to remove, failed to be acted on, while those which should have been retained were destroyed by sloughing. The explanation was that the fluid introduced into the loose margin of the connective tissue escaped to the extraneous parts. When weaker proportions were used, even after many repetitions of the injections, the hæmorrhoidal vessels remained comparatively unchanged. The method of cure by injection was also sometimes objectionable and even dangerous. The writer had seen a young and healthy man made seriously ill, with considerable fever and general septic poisoning supervening upon the injection of hæmorrhoids at the hands of one of our most capable men. The connective tissue around the anus remained for some days œdematous, redened, and painful. There now remained for discussion the operation of Mr. Whitehead, of cure by excision. This the author of the paper did not hesitate to accept as a step in advance of all surgical procedures previously discussed. It had been demonstrated that the vessels were frequently so deformed as to fail entirely in the original purpose for which they were designed, and the end sought to be obtained by all previous methods had been their destruction and removal. The real objection to destruction had been the fear of hæmorrhage, and, as a means to obviate this, the ligature and clamp and the cautery were devised. Mr. Whitehead had clearly shown that his method of dissection was safe, that the hæmorrhage was not excessive, and that a rapid cure resulted. The method was certainly scientific. By a clean dissection the parts which it was desirable to eliminate were removed. The free edges of the divided tissues were then stitched together, primary union generally resulting. Mr. Whitehead's method was best given in his own words:

"By the use of scissors and dissecting forceps the mucous membrane is divided at its junction with the skin around the entire circumference of the bowel, every irregularity of the skin being carefully followed. The vessels are then exposed by a rapid dissection of the mucous membrane, and the attached hæmorrhoids, thus separated from the submucous bed on which they rest, are