

In his contribution, Dr. Summers concludes that practically all cases are in some way due to traumatism, either avoidable or unavoidable, and that in operative manipulations involving either the omentum or the mesentery it is most important to be as gentle as possible.

To one who is always as careful and as gentle as his ability permits, all of such hæmorrhages are unavoidable.

When the hæmorrhage is strictly intestinal, as is the case after some operations for the relief of hernia, strangulated or even otherwise, or of appendicitis, it would seem that the mesenteric vessels alone are involved. Hæmorrhage after appendicectomy where an abscess has been drained is due no doubt to the ordinary causes of secondary hæmorrhage, namely, vascular thrombosis and sepsis, and in one recently watched to a fatal termination, a case of a retro-peritoneal appendiceal abscess complicated by suppurative pylephlebitis in which several profuse hæmorrhages occurred from the wound during the second week after operation.

In other cases hæmorrhage follows the operation of appendicectomy from causes which might perhaps be classed as avoidable. In the majority of these, according to the views of Dr. Wyeth, expressed in the *Journal of the American Medical Association*, July 13th, 1907, the cause is one of faulty technique and especially in the means employed to secure permanent hæmostasis.

He is still a firm believer in the silk or linen ligature for both the appendix and its mesentery, and from a variety of case reports in which post-operative hæmorrhage was a feature he is inclined to condemn the purse-string suture and catgut, as interfering to some extent with the safety of the patient so far as the complication under consideration is concerned.

In this, no doubt, he would receive support from many competent surgeons and would as surely be opposed by many others.

One cannot but feel, however, that in suitable cases an absolutely safe operation may involve the application of a purse-string suture, even of catgut. Applied carefully, before the detachment of the appendix, with a proper needle reaching to the resistant submucous coat and including the cut end of the appendiceal mesentery, and when carefully tied without constriction, the ligated base of the severed appendix and the cut end of its mesentery being carefully invaginated, the effect is commendable and the subsequent formation of adhesions is most unlikely.

Crushing alone, of the base of the appendix or of its mesentery as well, previous to invagination, does not yet impress one as a means of hæmostasis, with the feeling of security that comes from the use of the ligature, and especially when one remembers that in a considerable percentage of cases an artery of decidedly appreciable size runs in the wall