
Gastro intestinal anastomosis

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Despite the development of suture materials and advances in medical technology, gastro intestinal anastomoses continue to represent a challenge to the general surgeons. The two layer technique is still the method used by the majority of surgeons for anastomosis in esophagus, stomach, duodenum and small intestine. Leakage rates were considerably greater when a two layer technique was used for low colorectal anastomoses. It is undoubtedly true that it is much easier to perform an anastomosis in the pelvis with single layer technique and when the suture line is extremely low such as single layer is the only feasible technique. It is evident that there is no significant difference in the incidence of anastomotic breakdown with either two layer or one layer techniques when the anastomosis was performed above the pelvic peritoneal reflection. For anastomoses low in the pelvis, the single layer interrupted technique is made with less tissue trauma, less disturbance of circulation and is simple, safer and effective. Various stapling instruments are now widely used for gastrointestinal anastomoses. All staples are inserted by single application, Circular stapling devices especially the American EEA stapling gun are particularly useful when performing low colorectal anastomoses in men with narrow pelvis. This study has answered some but not all of our questions about this technique. We are reasonably satisfied that the stapled suture line is as secure in all respects as the hand sewn anastomoses. We are not sure however, that the stapled line is more secure. Mechanical stapling instruments do not absolve the surgeon from respecting the golden rules of operative surgery such as: clean, sharp, atraumatic dissection, careful haemostasis, respect for tissue viability and blood supply, use of healthy, disease free tissue in sutures, and anastomoses placed without tension. So that the teaching and learning of principles and clearer understanding of the differences between the principles and methods of anastomoses, should be facilitated and highlighted by an opportunity to use staples in addition to thread early in the residency experience. The instruments will not permit the safe performance of operative maneuvers by untrained or unskilled personnel. nor do they eliminate the necessity for rigorous surgical training. due regard for tissues. and of course training in the various manual techniques of resection and anastomoses. Recently there has been some interest in the use of tissue adhesives for the performance of "non suture" anastomoses. One of the supposed advantages of the adhesive technique is its greater speed. In view of the known safety of suture anastomoses of any type. it would seem that the adhesive anastomoses should not be employed until better adhesives have been evolved. Despite the good results obtained in esophagojejunostomy after total

gastrectomy and in the treatment of bleeding esophageal varices by application of magnetic rings, the procedure was never generally applied. It appears that type and incidence of complications, rate of anastomotic failure, and mortality rates are usually determined by factors other than the method or materials used in sewing the bowel. Doubtless, surgeons will continue to tie knots, but just as, if rock music has entered the classical concert hall, so the staple will have its place in the operating theatre.