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The evolution of the surgical approach to chronic ulcerative colitis

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Özet

Kronik ülseratif kolitin cerrahi tedavisindeki gelişmeler

Kolitis ülserozanın tedavisine yönelik ilk cerrahi girişim 1893'te Mayo Robson tarafından yapılmıştır. Bugüne kadar çeşitli araştırıcılar, değişik ve etkili yöntemler geliştirmişlerdir. Biz de bu alanda geniş çalışmalar yaptık ve 1947-48 yıllarında kolektomi+pull-through uygulanan hastalarımızla ilgili ilk bildirileri yayınladık. 1951'de ise, ileostomi yapılmaksızın, direkt endorektal pull-through grişimi ile tedavi edilmiş bulunan olguların değerlendirmelerini sunduk. Bu olguların amaliyat sonrası geç dönemde değerlendirilmelerinde kontinansın 3 hafta ile 9 ay kadar sonra oluştuğu ve hastaların sulu dışkı ile gaz arasındaki farkı anlayabilecek bir duyarlılıkta bulunduğu gözlendi. Bu olgularda dikkatimizi çeken diğer bir konu, gündüz kontinansının, gece kontinansından daha önce geliştiği idi. Gündüz tam olarak kontinan halde bulunan hastaların bir kısmında, gece uyku anında ufak dışkı sızmalarının görüldüğünü saptadık. Hastaların geç dönemdeki radyolojik incelemelerinde, aşağıya çekilen ileum ansında bir dilatasyonun oluştuğu ve bu genişlemenin hemen ileo-anal anastomozun üzerinde başladığı belirlendi. Böylece, gerçekleştirilen bu amaliyat ile ileumun son bölümünün genişleyerek bir neo-rektum oluşturduğu anlaşıldı. Hastalarda az sayıda da olsa saptanan tek önemli sorun, bazılarında neo-rektumun arkasında abse ya da abselerin oluşabilmesi idi. Bu tür abselerin devamlı olarak ortaya çıktığı az sayıdaki hastada, abdominal ileostomi yapılmak zorunda kalınmıştır. Tecrübelerimiz sonunda, mukozektomi yapılan rektal kas kılıfının boyunun gerekenden uzun olmasının sakıncalar getirebileceğini de anlamış bulunuyoruz. Sonuç olarak selim bir hastalık sebebiyle (kolitis ülseroza ya da polipozis koli gibi...) total kolektomi gereken olgularda " Endorektal mukozal stripping+ileal pull-through "un etkili ve yararlı bir tedavi olduğunu söyleyebiliriz.

Let us first all agree that fundamentally, ulcerative colitis should not be a surgical disease. It is not a mechanical problem and it is representative of one of the many conditions which ultimately will be curable without an operation but for which today operation is the only truly effective therapy. The operative approach to ulcerative colitis probably began in England in 1893 with Mayo Robson's use of sigmoid colostomy for the instillation of medications. Keith, two years later, employed an ascending colostomy for the same purpose and Bolton in 1901, a valvular cecostomy. R.F. Weir the next year with his interestingly titled paper, "A New Use For the Useless Appendix in the Treatment of Ulcerative Colitis," employed the appendix for the instillation of various types of drugs in the colon. Fundamentally, all of these treatments were of no more avail than most medicated enemas have been--except for cortisone enemas.

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In 1909 Allison in England made the observation that when cecostomy was performed, its benefits were probably due to the effects of the diversion of the fecal stream. J.Y. Brown in St. Louis, Missouri in a number of papers from 1911 to 1913 carrying this a step further argued for the importance of a completely diverting ileostomy to put the colon at rest. He postulated that this would give the colon an opportunity to heal and that the ileostomy could subsequently be closed. Harvey Stone in Baltimore, Robert Coffey in Portland, Oregon, and Frank Lahey in Boston, were all exponents of this. They pointed out that the gastroenterologists were referring patients to them so late that the mortality from ileostomy was extremely high and the patients had no opportunity to recover. Unfortunately as it turned out, even when the patients were referred to them earlier, although the mortality associated with the operation did indeed drop significantly, there was almost never a permanent cure of the underlying disease. It became apparent that once a patient had pancolitis, involvement of the entire colon and rectum with ulcerative colitis, it was extremely rare that that patient and his colon would ever recover completely. It became generally to be accepted that once a patient had pancolitis, he would ultimately have to have a total colectomy. Franklin in 1931 and R.P. Cattel showed the way with multiple stage resections--ileostomy in the first stage, right colectomy in the second stage, completion of the abdominal colectomy in the third stage, abdomino perineal resection in the fourth stage. This was the philosophy which I espoused when first becoming involved with the operative treatment of ulcerative colitis in the late 30 ' s. In the late 40' s we began to experiment with one-stage pancolectomy, though many of our patients had already had an ileostomy. Earlier S.T.P. Macguire in New York had published a single such case. Gavin Miller in Montreal began his series of one-stage colectomy about the same time that we did. Ripstein, Miller's younger associate followed soon after. It became apparent to us that any patient who was stable and in reasonably good health and undergoing elective consideration for removal of his colon, could stand the pancolectomy and abdominal ileostomy in one stage. We soon came to the further conclusion that the operation in one stage was safer in the profoundly ill patients than a staged operation. The profoundly ill patients with sepsis, bleeding or cachexia could tolerate the operation if at the conclusion of the operation they were well of their disease. They might well not tolerate the operation if the diseased ractum was retained. We experienced, or saw in the practice of our colleagues, necrosis of the retained rectum, serious wound infections if the retained rectum was brought out as a mucous fistula, and massive hemorrhage from the retained rectum, sometimes fatal.

At the same time we began to study the possibility of preserving continence, reasoning that ulcerative colitis was a mucosal disease and that it was not necessary to remove the rectal musculature or to interfere with the sphincteric mechanism but only to remove the offending mucosa. In fact, we devised the operation to treat another mucosal disease of the colon, polypoid adenomatosis but from the first pointed out the applicability of the operation to ulcerative colitis, first performed it on a patient with ulcerative colitis. Most of the experience with the endorectal mucosa stripping and ileal pull-through was with ulcerative colitis because of its greater prevalence. In 1947 and 1948, we reported our first experiences with pancolectomy after preliminary ileostomy, pulling the ileum down through the intact rectum, denuded off its mucosa. Shortly after W.G. Watson, in Pittsburgh, an old time Hopkins associate, performed the operation on a patient whom I saw a few weeks ago who is well and continent 40 years after her anal ileostomy for ulcerative colitis. Subsequently, there were a number of publications from the United States, from Hamburg and elsewhere using the method as originally described.

The colon, having been completely freed up from above, the mucocutaneous line was incised circumferentially and the mucosa and submucosa stripped from within the tube of rectal musculature to as high a level as possible. At that level, the muscular coat was cut through, permitting the entire colon to be brought down through the inside of the denuded tube of rectal musculature

and through the anus. The ileum was pulled down as well and sutured in place in three layers, the last one to the skin.

In 1951 we reported a series of such patients in whom the operation was performed without a preliminary ileostomy, the technique of the operation being otherwise unchanged. Our patients became continent at periods of time from three weeks to 9 months and could distinguish liquid stool from gas. Daytime continence was always recovered before night time soiling while others were completely continent by day and by night. Our patients with polyposis all did well except one in whom the operation failed at once for technical reasons. The patients with ulcerative colitis did less well although there indeed were successes among them. For one thing, later, when it became recognized that Crohn's disease could involve the colon too in what became known as granulomatous colitis with transmural disease, we realized a number of our patients had had that disease and not ulcerative colitis. The use of a complementary ileostomy at the time of the pull-through to permit the ileoanal anastomosis to heal without having to serve as a conduit for stool was introduced back in 1955 by Schneider at St. Louis and more recently strongly championed by Martin of Cincinnati, to whom, I believe, the resurgence of the popularity of the operation is mainly due.

The next advance was certainly the introduction of the various varieties of pouch reservoirs. In 1969 nils Koch of Göteborg, Sweden, published the first of a series of contributions in the continent ileostomy. He made a pouch near the end of the ileum creating a nipple in the terminal end to achieve continence. The procedure has been repeatedly modified and has had extensive trials in this country and elsewhere. It can work very well, with complete "continence" achieved by catheterization 3 or 4 times a day. Ultimate success frequently requires one or several reoperations, usually for reconstruction of the continence mechanism, the intussuscepted nipple.

With the anal ileostomy, it is obvious that a reservoir will be created either by the surgeon or by the patient. X-rays of our patients months after operation showed a progressive dilatation of the ileum above the anal anastomosis. The ileum is not used to periods of obstruction and if you bring it through a continent sphincter you are creating a situation in which the bowel is completely obstructed between stools. Alan Parks of London with Nichols in 1977, introduced the spouted triple pouch, Utsonomiya of Japan, the J-pouch and Fonkalsrud of California, the lateral isoperistaltic pouch. The best review of the subject I have read is that by N.S. Williams and D. Johnston in the British Journal of Surgery for 1985.

Parks twice doubled the end of his ileum in the pelvis, uniting all three resultant loops into a single pouch, leaving the end to protrude just a short distance beyond the bottom of the pouch. The spout was sutured to the anus. Utsonomiya simply doubled the bowel making a long lateral anastomosis and then opened the end at the U-turn, bringing the stoma down to form the anal anastomosis. Finally, Nichols has proposed a W-pouch with four loops anastomosed together by a series of a long uniting lateral anastomoses.

There is a considerable discussion still as to which type of pouch is better, how short the spout should be, etc. It has been generally agreed that the long tube of rectal musculature denuded of its mucosa which I was at pains to construct is not necessary and that a relatively short one possibly does better. Some do the mucosal stripping from below, some from above. Almost all of the workers in the field today employ a pouch and a temporary complementary ileostomy.

Nevertheless, Coran of Ann Arbor, Michigan, in a large series in which he has had extraordinarily good results, has returned essentially to the original operation without a pouch of any kind and without a complementary ileostomy.

I think you must accept the fact that some of these patients are absolutely continent by day and by night. Some of them absolutely by day and leaking a little at night. Some of them staining a little even during the day. I have come to distrust

the patient's own evaluations of satisfaction and their descriptions of continence. The idea of returning to an abdominal ileostomy is so often abhorrent that patients tend to minimize any incontinence they may have, lest they be advised to have an ileostomy. Besides, most patients try to tell the doctor what they think he wants to hear. With a personal experience now of 40 years, although granted with operations perhaps not always performed as well as they are today, I would agree that the operation can be a blessing to patients who must have their colons removed for benign mucosal disease and for most of them the result will be preferable to abdominal ileostomy. The patients must be warned that it may be a period of days or weeks, in some cases months, until continence is restored, there may be considerable seepage of small bowel contents which will burn the perineum and be quite distressing. What concerns me most is that some of our patients after many years have had one or several abscesses in the pelvis behind the neorectum, sometimes repeatedly, and have ultimately had to have abdominal ileostomy performed. Whether this is due to stasis or to perforation by ingested foreign bodies I am unable to say. In any case, if a patient can go 10, 20 or 30 years having continent stools by the normal route that is a very worthwhile achievement. I have learned two of Dr. Schneider's St. Louis patients have turned up with cancer in the neorectum, one squamous and one adenocarcinoma. If in the original operation some of the diseased rectal mucosa was buried, it is quite possible that the adenocarcimoma arose from that. I have no clinical details about that patient or about the one with squamous carcinoma. Series of hundreds of these patients or more are now being followed throughout the world with almost no initial mortality, and early results which are remarkably good. We should presently be able to make a very accurate evaluation of the position which the endorectal mucosal stripping pull-through operation should have in the operative treatment of patients who require total colectomy for benign disease.

Kaynaklar

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