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Low Anterior Resection Syndrome. Anatomical Changes after Anterior Rectal Resection

Virgiliu-Mihail Prunoiu[1], Mircea-Niculae Brătucu[2], Dragoș Garofil[2], Victor Strâmbu[2], Eugen Brătucu[1], Laurențiu Simion[1], Eduard-Georgian Chiru[1], Petru Adrian Radu[2]
[1]1st Department of General and Oncological Surgery, Prof. Dr. Alexandru Trestioreanu Oncological Institute, Fundeni Street 252, 022328 Bucharest, Romania
[2]Department of General Surgery, Dr. Carol Davila Clinical Hospital, Calea Griviței 4, 010731 Bucharest, Romania
Carol Davila University of Medicine and Pharmacy, Dionisie Lupu Street 37, 020021 Bucharest, Romania

Abstract
In this editorial, the authors bring to the attention of surgeons a personal point of view with the intention of offering a series of anatomical arguments to explain the high rate of functional complications following ultralow rectal resections, resections dominated by faecal incontinence of various intensities. Having as a starting point the anatomy of the pelvic floor and the posterior perineum, the authors are concerned with the functional outcomes of the sphincter-saving anterior rectal resection, regarding the low and ultralow resection. Technically, a conservative surgery for low rectal cancer has been currently performed. If 25 years ago the abdominoperineal resection was the gold standard for rectal cancer located under 7cm from the anal verge, nowadays the preservation of the anal canal as a partner for colon anastomosis has been accomplished. Progressively, from a desire to preserve the normal passage of stool into the anal canal, as anatomically and physiologically as possible, the distal limit of resection was lowered to 2-4 cm from the anal verge and ultra-low anastomoses were created, within the anal sphincter complex. The stated goal: keep the oncological safety standard and, at the same time, avoid definitive colostomy. Starting from the normal anatomy of the pelvic floor and the anorectal segment, the authors take a look at the alterations of the visceral, muscular, and nerve structures as a consequence of the low anterior resection and, particularly, the ultralow anterior resection. A significant degree of functional outcomes regarding defecation, with the onset of marked disabilities of anal continence, the major consequence being anal incontinence (30-70%), have been noticed. The authors go under review for the main anatomical and physiological changes that accompany anterior rectal resection.
Conclusions: Thus, the following questions arise: what is the lower limit of resection to avoid total fecal incontinence? Is total incontinence a greater handicap than colostomy or is it not? The answers cannot be supported by solid arguments at this time, but the need to initiate future studies dedicated to this problem emerges.
Key words: low anterior resection syndrome (LARS), ultralow anterior resection (ULAR), low rectal cancer