Surgical treatment of rectal cancer: innovations and controversies

During last decades, there have been a number of critical improvements for the treatment of rectal cancer. Since the milestone description of the abdominoperineal resection by Miles more than 100 years ago, for treatment of lower rectal tumors, surgical advances have progressed along the last century including low anterior resection with Knight and Griffen reconstruction, colonic pouches, etc. However, the most important advance was the description by Heald in the 80's of the concept of total mesorectal excision. This new paradigm permitted to reduce the local recurrence below 5%. During last years and in parallel with the development of minimally invasive surgery, a number of technical and conceptual advances have occurred in the field of medico-surgical treatment of rectal tumors. I want to thank to *ALES* to have the opportunity to resume in this monographic issue a number of this innovative ideas and controversies in rectal cancer treatment. An important trend during the last years has been to develop organ preserving treatments, using the transanal approach. Flexible endoscopic ESD and EMR (Arezzo), transanal rigid platform (TEM) (Allaix) and transanal soft platform (TAMIS) (Bergamaschi) are analyzed comparing the pros and cons of these conservative approaches. Laparoscopic surgery has been demonstrated to be an effective approach to the lower rectal cancer, but dealing with tumors located in the distal third of the rectum continues to be a challenge. Recent improvements include robotic approach (Gorgun), as well the innovative TaTME access (Bonjer). Both techniques are looking for its exact role in the management of difficult lower rectal cancer. An additional technical advance that has a promising role for the evaluation of the bowel perfusion during surgery of the large bowel and rectum is the use of indocyanine green dye (Diana), a complementary intraoperative exploration that add paramount information for the intraoperative decision making. In some instances, abdominoperineal resection could not be avoided, and a current controversy looking for the definitive role of extended rectal resection continues to be open (Biondo). Finally, the greater success for treatment of cancer is to avoid surgery. Chemoradiotherapy may be a definitive radical treatment without the need of further surgery, and a chapter dealing with this topic is also included (Habr-Gama). For sure exists a number of additional topics related to rectal cancer that could be of interest, but we considered that the current index with so high quality authors covers extensively most important controversies. I hope that this monographic issue will be of interest for the reader, helping to update the most advanced knowledge on rectal cancer treatment.

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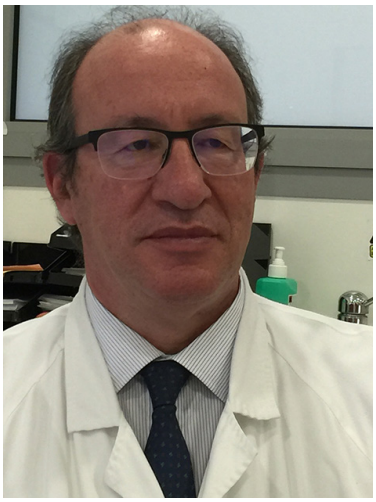

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