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LETTER TO THE EDITOR

There is a Direct Relationship Between the Circumferential Resection Margin Positivity and Locoregional Recurrence Due to the Perirectal Remained Tumor Cells After the Rectal Resection, Especially in the Lower Rectal Cancer Surgery

Özellikle Alt Rektal Kanser Cerrahisinde, Rektal Rezeksiyondan Sonra, Perirektal Kalan Tümör Hücrelerine Bağlı Olarak, Çevresel Rezeksiyon Sınırı ile Lokal Bölgesel Nüks Arasında Doğrudan Bir İlişki Vardır

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Keywords: Rectal cancer, locoregional recurrence, circumferential margin, ischioanal fossa
Anahtar Kelimeler: Rektum kanseri, lokal bölgesel nüks, çevresel sınır, iskioanal fossa

Dear Editor;

It has been shown that significant decreases in locoregional recurrences of the rectal cancer after introduction of the total mesorectal excision technique into the rectal cancer surgery which was described by Heald et al.[1]. Along for all that, locoregional recurrence stands as a surgical challenge especially in the lower rectal cancer surgery. A lower rectal cancer has different clinic and oncologic features when compared with the cancers localized in other parts of the rectum. The most important cause of these features may have been sourced from anatomical especilities of the lower rectum. The lower rectum is situated into the narrow funnel-shape muscular tube. While the upper and middle thirds of the rectum have abdominopelvic localization, the lower third of the rectum has abdominopelvic and ischioanal localization when levator ani muscle, which is considered as the bottom of the abdominopelvic cavity is taken as a milestone. Ischioanal 2/3 distal part of the lower rectum and anatomic anal canal forms the surgical anal canal together with the external anal sphincteric musculature which completely surrounds them in the ischioanal fossa. The external anal sphincteric musculature should be considered as coil-like muscular tube surrounding the distal part of the lower rectum in the ischioanal fossa. In this manner, the surgical anal canal is composed of the intertwined two cylindrical muscular tubes. Circumferential resection margin (CRM) term is used for tumor cell existence at the radial borders of the resected specimen, and a well-known locoregional and distant metastasis predictor of the rectal cancer.[2] CRM involvement is very important as well as the tumoral cell existence at proximal or distal resection borders of the resected specimen. It is shown that lower rectal has higher CRM positivity compared to other parts of the rectum. While the total mesorectal excision border is taken into account for evaluation in term of the circumferential resection border positivity in the supralevator abdominopelvic part of the lower rectum, the radial border of the resected rectum should be considered in the sublevator ischioanal part of the lower rectum due to the ischioanal fossa don't contain of the mesorectal tissue. The rectum has an abdominopelvic

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localization in which all abdominal facial layers are fused. In this manner, the rectum has been situated into a fascial package derived from embryonic layers. After arising in the mucosa, rectal cancer makes local invasion in the bowel wall chiefly at the radial direction towards to serosa. If a rectal cancer is found to be have a positive circumferential resection border in the histopathologic examination, it should be considered as a T4 rectal tumor, locally. From another point of view, CRM positivity should be described the possibility of the remained tumor cells at the perirectal tissues is quitely high after the rectal excision. It has been clear that mucosal tumoral infiltration emerges in time, after the extraluminal tumoral occurrence in the perirectal tissues in the recurrenced rectal cancer cases. Moreover, distant metastasis may have been facilitated by disruption of the embryonic facial package and systemic dissemination of the revealed remnant tumoral cells in the CRM positive rectal cancer cases. When looked from this point, CRM positivity should not be considered only the radial border involvement of the resected specimen, it should be considered as the existence of the revealed remnant tumoral cells in the operation area.

Ethics

Peer-review: Internally peer-reviewed.

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