



## ASO Author Reflections: What is the Impact of Different Rectal Reconstruction Techniques After Total Mesorectal Excision on Quality of Life?

Karin Ribí, PhD<sup>1,2</sup>, and Jürg Bernhard, PhD<sup>1,3</sup>

<sup>1</sup>International Breast Cancer Study Group (IBCSG) Coordinating Center, Bern, Switzerland; <sup>2</sup>SAKK Coordinating Center, Bern, Switzerland; <sup>3</sup>Bern University Hospital, Inselspital, Bern, Switzerland

### PAST

Due to advances in surgical procedures, surgical resection followed by rectal reconstruction is the treatment of choice in most patients with rectal tumors. Straight colorectal anastomosis (SCA) can lead to impaired function of intestinal continuity. Therefore, several other reconstructive techniques have been developed to improve functional outcomes, including colon J-pouch (CJP), side-to-end anastomosis (SEA), and transverse colectomy.<sup>1,2</sup> Randomized controlled trials (RCTs) comparing these different techniques had limited statistical power due to their relatively small sample sizes, were frequently based on single-center experience, or reported results addressing a relatively short follow-up period. In addition, these RCTs rarely included quality-of-life (QoL) endpoints, although QoL may depend on functional outcomes.<sup>1,2</sup>

### PRESENT

In a prospective, multicenter RCT, we investigated QoL outcomes after total mesorectal excision (TME) and rectal replacement in 257 patients by comparing SEA, 5 cm CJP, and SCA up to 24 months post-surgery.<sup>3</sup> The comparison of functional outcomes revealed no major differences with respect to composite defecation and incontinence scores among the three groups at all time points (6, 12, 18, 24 months).<sup>4</sup> In contrast, patients who had SEA or SCA reported significantly worse physical, emotional, and overall QoL in the short-term (6 months after TME) compared with those who had CJP. Similarly, patients with SEA or SCA reported a clinically relevant worsening for some of the QoL domains up to 6 months after surgery, which recovered thereafter. Patients who had a CJP showed a rather stable QoL profile over the whole observation period.<sup>3</sup> These results complement those on functional outcomes and provide valuable information for the discussion of the most appropriate technique in accordance with the patient's preferences.

### FUTURE

Validated QoL measures, as used in our and other studies, were developed for patients with colorectal cancer and may lack the ability to assess problems that are unique to the situation after having had a rectal reconstruction. Generic (i.e. not disease-specific) QoL measures assessing fecal incontinence were found to be reliable and valid, but not responsive to condition severity.<sup>5</sup> Future studies should focus on using appropriate tools to assess both cancer- and function-related QoL domains, such as, for example, aspects related to sexuality and social functioning. In addition, the interaction of functional and QoL outcomes

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K. Ribí, PhD  
e-mail: karin.ribi@ibcsg.org

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over a longer follow-up period comparing different reconstruction techniques may help to identify patients with a higher risk of a detrimental QoL.

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