The POLARS tool for prediction of low anterior resection syndrome in rectal cancer patients undergoing laparoscopic surgery – does it work?

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Background: Radical rectal cancer resection may lead to long-term bowel function impairment called Low Anterior Resection Syndrome (LARS). It remains unclear as to which patients are at higher risk of developing LARS post surgery. To assess the risk of this complication, acquire an accurate informed consent from the patient and tailor the follow-up period, a series of scales are being used to project the postoperative period. One of these tools is the POLARS scale, designed to predict the onset and severity of LARS in rectal cancer patients after laparoscopic surgery.

Aim: Assess the accuracy of the POLARS tool in predicting the onset of LARS and its severity in rectal cancer patients after laparoscopic low anterior resection surgery.

Materials and methods: 62 rectal cancer patients treated laparoscopically between January 2016 and March 2017 were included in this retrospective study. Using POLARS, the predictive value for occurrence of LARS was documented. In the 6 to 24-month follow-up period, the bowel function of the patients was assessed by a dedicated LARS questionnaire. The predicted and the actual scores were then compared.

Results: 27 women (43,5%) and 35 men (56,45%) were included in the study. The mean age was 63,5 years (min 35, max 80, SD 9,9). The mean predicted score acquired by POLARS was 25,18 (i.e. category "Minor LARS") and the mean actual score in the follow-up period was 28,71 (also "Minor LARS" category). However, on patient-by-patient analysis it turned out that in only 23% of the cases the predicted LARS category was the same as the actual LARS category assessed by the questionnaire.

Conclusions: The POLARS tool did not prove to be accurate in predicting the risk and severity of LARS in patients undergoing low anterior resection surgery, although in the average numbers on the bigger cohort seem promising. Further evaluation of POLARS tool on a bigger cohort is needed to back up this hypothesis.

Kategoria: K4. Chirurgia kolorektalna – nowe metody i techniki operacyjne / Chirurgia minimalnie inwazyjna w nowotworach narządowych / Powikłania w chirurgii minimalnie inwazyjnej / Colorectal surgery – new methods and surgical techniques / Minimally invasive surgery in organ tumors / Complications in minimally invasive surgery