

Long-term Bowel and Stoma Following Colorectal Cancer Surgery

Akademisk avhandling

som för avläggande av medicine doktorexamen vid Sahlgrenska akademien, Göteborgs universitet, kommer att offentligens försvaras i Järneken Aula, Östra sjukhuset, Diagnosvägen 15, fredagen den 19 april 2024, klockan 09.00

av Sofia Sandberg

Fakultetsopponent:

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Avhandlingen baseras på följande delarbeten

- I. Sandberg S, Asplund D, Bisgaard T, Bock D, Gonzalez E, Karlsson L, Matthiessen P, Ohlsson B, Park J, Rosenberg J, Skullman S, Sorensson M, Angenete E. **Low anterior resection syndrome in a Scandinavian population of patients with rectal cancer: a longitudinal follow-up within the QoLiRECT study.** *Colorectal Dis.* 2020;**22**(10):1367-78.
- II. Sandberg S, Asplund D, Bock D, Ehrencrona C, Ohlsson B, Park J, Rosenberg J, Smedh K, Walming S, Angenete E. **Predicting life with a permanent end colostomy: A prospective study on function, bother and acceptance.** *Colorectal Dis.* 2021;**23**(10):2681-9.
- III. Sandberg S, Bock D, Lydrup ML, Park J, Rutegård M, Angenete E. **The impact of the anastomotic configuration on low anterior resection syndrome 3 years after total mesorectal excision for rectal cancer: a national cohort study.** *Colorectal Dis.* 2023;**25**(6):1144-52.
- IV. Sandberg S, Park J, Tasselius V, Angenete E. **Bowel Dysfunction after Colon Cancer Surgery: A Prospective, Longitudinal, Multicenter Study.**
Submitted manuscript.

**SAHLGRENKA AKADEMIN
INSTITUTIONEN FÖR KLINISKA VETENSKAPER**



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ABSTRACT

Aim The aim of this thesis was to explore bowel and stoma function following colorectal cancer surgery, to investigate associated distress and identify possible risk factors.

Methods *Papers I, II, and IV* were based on two prospective, observational cohort studies focusing on rectal cancer (*I, II*) and colon cancer (*IV*). *Paper I* included patients who had an anastomosis, while *paper II* included patients with a permanent stoma. *Paper III* was a registry-based cross-sectional study.

Results *Paper I* found that more than half of the patients experienced significant bowel dysfunction, identifying a defunctioning stoma as a risk factor. Distress was common, decreasing over time. In *paper II*, most patients reported high stoma functionality and acceptance, only one-fifth experienced distress. *Paper III* demonstrated that the anastomotic configuration had equal impact on bowel dysfunction. *Paper IV* showed that most patients maintained intact bowel function after colon resection. After right-sided resections loose stools were common and associated with distress, as was incontinence.

Conclusion Providing preoperative information, managing expectations, and ensuring early detection and treatment of symptoms are important to achieve optimal function and minimise distress. For patients with minimal or no impairment, extensive follow-up may be unnecessary.

Keywords: Colorectal cancer, functional outcome, surgical technique.