

Abdominoperineal excision for distal rectal carcinoma

Oncological outcome and aspects of self-assessed quality of life

Akademisk avhandling

Som för avläggande av medicine doktorexamen vid Sahlgrenska Akademin, Göteborgs Universitet kommer att offentligen försvaras i Aulan, Centralkliniken, Sahlgrenska Universitetssjukhuset/Östra, fredagen den 14 oktober 2016, klockan 9.00

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Avhandlingen baseras på följande delarbeten:

- I. Abdominoperineal extralevator resection**
Prytz M, Angenete E, Haglind E. Dan Med J (2012) 59(9): A4366.
- II. Extralevator abdominoperineal excision (ELAPE) for rectal cancer - short-term results from the Swedish Colorectal Cancer Registry. Selective use of ELAPE warranted**
Prytz M, Angenete E, Ekelund J, Haglind E. Int J Colorectal Dis. (2014), 29(8): 981-987.
- III. Extralevator Abdominoperineal Excision for Low Rectal Cancer - Extensive Surgery to be Used With Discretion Based on 3-Year Local Recurrence Results: A Registry-based, Observational National Cohort Study**
Prytz M, Angenete E, Bock D, Haglind E. Ann Surg. 2016 Mar; 263(3): 516-21
- IV. Association between operative technique and intrusive thoughts on health related quality-of-life three years after APE/ELAPE for rectal cancer**
Prytz M, Ledebø A, Bock D, Angenete E, Haglind E. Manuscript

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Abstract

In recent years an adjusted method of performing an abdominoperineal excision (APE) - so called extralevator APE - has been developed and internationally spread. It has been proposed to decrease intraoperative perforations and non-radical surgery and therefor improve local cancer control and decrease rates of local recurrences as compared to standard APE. This thesis aims to investigate if the oncological outcome of ELAPE is superior to standard APE and to explore the association between patient reported intrusive thoughts and QoL as well as to type of surgery performed three years after surgery and to compare outcome to that found in a normative Swedish cohort.

Data on all Swedish patients operated with any kind of APE in the years 2007-2009 were collected from the Swedish ColoRectal Cancer Registry and short-term oncological outcome was measured (i.e. perforations and non-radical surgery) as well as short-term complications and mortality. In order to be able to differ between APE and ELAPE, all patients' operation notes were collected from the hospital charts where they had been operated, and analysed with regard to which operating technique had been used. When 3-years local recurrence data were available in the registry these data were also collected from the registry and analysed with regard to what operation had been performed. Furthermore, a special questionnaire was developed in order to be able to measure a number of health-related QoL parameters specific for this group of patients. The questionnaire was sent to all patients alive 3 years following surgery and data on QoL was compared to data from a Swedish normative population.

Short-term oncological results were the same for both groups with regard to perforation and non-radical surgery. There were fewer intraoperative perforations for a subgroup of the most distal tumours in the ELAPE group but not for the entire group. There were more wound infections for the ELAPE-group.

Local recurrences after 3 years were significantly more common in the ELAPE group as compared to standard APE but there was no difference between groups in overall survival. Intraoperative perforation was significantly associated with higher risk of local recurrence.

A large proportion of survivors after abdominoperineal excision for rectal cancer have a quality of life comparable to a normative population, however many suffer from a symptom of stress, negative intrusive thoughts, which significantly decrease overall quality of life.

Oncological outcome following ELAPE is not superior to standard APE. ELAPE is associated with more perineal wound complications. This method should be used in selected patients with high risk of intraoperative perforation.

Keywords: Rectal cancer, Abdominoperineal excision, Extralevator Abdominoperineal excision, ELAPE