

Ulcerative Colitis – Surgery Outcome and Pathophysiological Aspects

Akademisk avhandling

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av

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Avhandlingen baseras på följande delarbeten:

- I. **Block M, Börjesson L, Lindholm E, Öresland T**
Pouch Design and Long-term Functional Outcome after Ileal Pouch-Anal Anastomosis.
Br J Surg. 2009 May; 96 (5): 527-32.
- II. **Block M, Börjesson L, Willén R, Bengtsson J, Lindholm E, Brevinge H, Saksena P**
Dysplasia or Cancer in the Colorectal Specimen in Patients with Ulcerative Colitis and Ileal Pouch-Anal Anastomosis – Rationale for Routine Surveillance?
Submitted for publication in Journal of Crohn's and Colitis.
- III. **Block M, Jørgensen KK, Øresland T, Lindholm E, Grzyb K, Cvancarova M, Vatn MH, Boberg KM, Börjesson L**
Colectomy for Patients with Ulcerative Colitis and Primary Sclerosing Cholangitis – what next?
Journal of Crohn's and Colitis 2013 Nov 14. doi: 10.1016/j.crohns.2013.10.008. [Epub ahead of print]
- IV. **Block M, Mölne J, Leffler H, Börjesson L, Breimer ME**
Immunohistochemical Studies on Galectin Expression in Colectomised Patients with Ulcerative Colitis.
Submitted for publication in Histology and Histopathology.



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ABSTRACT

Background:

Ulcerative Colitis (UC) is a chronic inflammatory bowel disease; the etiology is mainly unknown. Around 30% of the patients are treated by surgery. The aims of this thesis were to evaluate outcome after specific surgical procedures and to investigate possible pathophysiological aspects.

Methods:

Functional outcome after ileal pouch-anal anastomosis (IPAA) and ileo-rectal anastomosis (IRA) was recorded by Öresland score; different pouch designs (**K** or **J**) were compared. Frequency of neoplasia in IPAA:s was evaluated in patients with previous neoplasias. Patients with UC and primary sclerosing cholangitis (PSC) were compared to patients with UC-only regarding outcome of IPAA or IRA. Galectin expression was investigated in full wall specimens from patients with UC.

Results:

IPAA:s with **K**-design and stapled anastomosis were associated with better Öresland score than IPAA:s with **J**-design. The obtained frequency of dysplasia in IPAA:s was 1.8% (95%-CI: 0-5.3%) in patients with previous neoplasia. Patients with UC-PSC operated on with IPAA have similar outcome as patients with UC-only, except for higher incidence of pouchitis. Patients with IRA in the same setting, have worse functional outcome and an increased rate of failure. There was no correlation between galectin expression and inflammatory grade.

Conclusions:

K-design was associated with best functional outcome; however, the study was non-randomized. The frequency of dysplasia after IPAA is low, even in a selected risk group. IPAA seems superior to IRA in patients with UC-PSC. The role of galectins in the pathogenesis of UC remains to be elucidated.

Keywords: Ulcerative Colitis, Long-term Function, IPAA, IRA, Neoplasia, Surveillance, Primary Sclerosing Cholangitis, Galectins, Immunohistochemistry