

Prospective Quality Assessment of Screening-Colonoscopy in Berlin (Berlin Colonoscopy Project, BECOP-3).

Andreas Adler 1, Jens Aschenbeck 2, Alireza Aminalai 2, Rolf Drossel 2, Andreas Schröder 2, Michael Mayr 2, Elke Wettschureck 1, Ioannis Papanikolaou 1, Bertram Wiedenmann 1, Thomas Rösch 1

1. Central Interdisciplinary Endoscopy Unit, Charite University Hospitals, Campus Virchow Hospital, Berlin, Germany; 2. Private Gastroenterology and Endoscopy Offices in Berlin, Germany

INTRODUCTION

Routine documentation of screening-colonoscopy provides a basis for information on the quality of healthcare in Germany. Special quality aspects e.g. instrument withdrawal time, preparation quality or patient acceptance remain largely unaccounted for; there has also been no audit performed for collected data. In the present assessment, we prospectively gathered and analyzed various quality aspects of screening-colonoscopy.



AIMS & METHODS:

From October 2006 to March 2008, we prospectively documented results, sedation, preparation-quality and complications of all screening-colonoscopy performed in 18 private practices in Berlin. Patients were given questionnaires, which they were instructed to send back after one week; questions included e.g. acceptance of colonoscopy-preparation, overall colonoscopy acceptance, as well as eventual late complications. A 5-year-follow-up has been planned.

RESULTS:

In an intermediate analysis till end September 2008, 12135 examinations were documented [m:f=47%:53%, mean age: 64.5 years (range ±13)]. The following data were found: Coecum-intubation rate: 98%; adenoma detection rate: 21.05%; patients with adenomas: 2548; total number of adenomas: 3818; patients with polyps: 4102; total number of polyps: 6973; adenomas per patient: 1.5; carcinomas: 101 (0.83%). Among the detected adenomas, 24.2% were flat lesions and 0.9% contained histologically high-grade dysplasias (HGIN). Instrument withdrawal time was 8.4 min (mean) and 80 complications were recorded (0.66%), 14 of which were primarily noted in the received questionnaires. In regards to patient acceptance (feed-back until now 88% concerning doctors-CRF's and 83% concerning audit) colonoscopy was viewed as well acceptable in 44% and as somewhat unpleasant in 30% of patients.

BECOP total results as evaluated at the 22th of September 08

Case-number n=12135
Duration of the study (with variable beginning) 10/06 bis 3/08

Completeness after audit

Filled in Doctors-CRF
In comparison to all examined patients 90 %
Patients-CRF until now n= 8519 70% of the doctors-CRF
Due to audit/reworking we suspect an increase of the redeliveries of more than 80%.

Private practices

18 private practices with a total of 21 examiners took part. The included case-volume was between 137 and 1097.

Patients

Male/Female 47% - 53%
Mean age 64,5 years (64,8 men, 64,3 women)

LITERATURE:

- Adler A, Pohl H, Papanikolaou IS, Abou-Rebyeh H, Schachschal G, Veltzke-Schlieker W, Khalifa AC, Setka E, Koch M, Wiedenmann B, Rösch T.: A Prospective Randomized Study on Narrow-Band Imaging versus Conventional Colonoscopy for Adenoma Detection: Does NBI Induce a Learning Effect? Gut 2008;57:59-64.
- Adler A, Roll S, Marowski B, Drossel R, Rehs HU, Willich SN, Riese J, Wiedenmann B, Rösch T; for the Berlin Private-Practice Gastroenterology Working Group: Appropriateness of Colonoscopy in the Era of Colorectal Cancer Screening: A Prospective, Multicenter Study in a Private-Practice Setting (Berlin Colonoscopy Project 1, BECOP 1). Dis Colon Rectum. 2007;50:1628-38.

Colonoscopy-Performance

Cecumrate	98% (Cecum: 65%, Ileum: 33%)
Colon-cleanliness	87.5% good or sufficient 3.3% bad or insufficient
Withdrawal-time	8.4 ± 5.2 min
Sedation	None 15% Dormicum-based 35% Propofol-based 49% Others 1%
Sedation-quality (judgement by the examiner)	85% complet oder sufficient

Colonoscopy-results

Adenomarat	0.315 (all Adenomas/all Patients)
Patients with Adenomas	21.05%

Complications

Acute diagnosed during colonoscopy	0.66%
Later diagnosed by the examiner	0.12%
Stated by the patient (will be clarified in detail)	3.4%

Patients-inquiry (Data still incomplete; n=8519)

Complaints after the examination (multiple mentioning is possible)

•Flatulence	48%
•Pain after very strong flatulence	13.5%
•Minimal bloodloss	3.1%
•Strong bloodloss	0.3%
•Fever	0.2%
•Circulation problems	5.8%
•Others	4.8%

Preparation

•Good acceptable	44%
•Something unpleasant	30%
•Unpleasant, tolerable	22%
•Very unpleasant	4%

Sedation

•None	17%
•Very good, nothing remarked	53%
•Very good, remarking something	23%
•Effect not enough, something unpleasant	4%
•Effect not enough, painful	2%
•Uneffective, very painful	0.5%
•Others	0.5%

Examination itself

•Good acceptable	76%
•Something unpleasant	16%
•Unpleasant, tolerable	7%
•Very unpleasant	1%

CONCLUSIONS:

The present prospective investigation shows a high Coecum-intubation rate and an excellent patient acceptance. Some 25% of adenomas were classified as flat. In 1.7% of patients advanced histologies (carcinoma or HGIN) were found. According to delayed-questioning of patients complication-rate increased by about 20%.