Elisabeth Vinzenz Verbund

St. Joseph Krankenhaus
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Was gibt es Neues aus der Chirurgie?

PD Dr. med. Christoph Holmer
Klinik für Allgemein- und Viszeralchirurgie
am St. Joseph Krankenhaus Berlin Tempelhof

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Chirurgie bei CED

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Berlin Tempelhof

Colitis ulcerosa

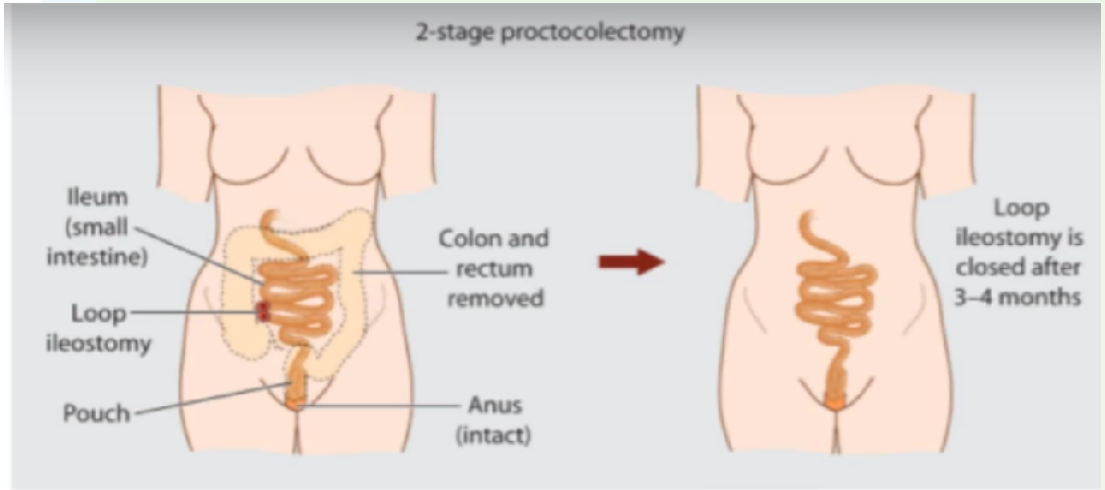
Morbus Crohn

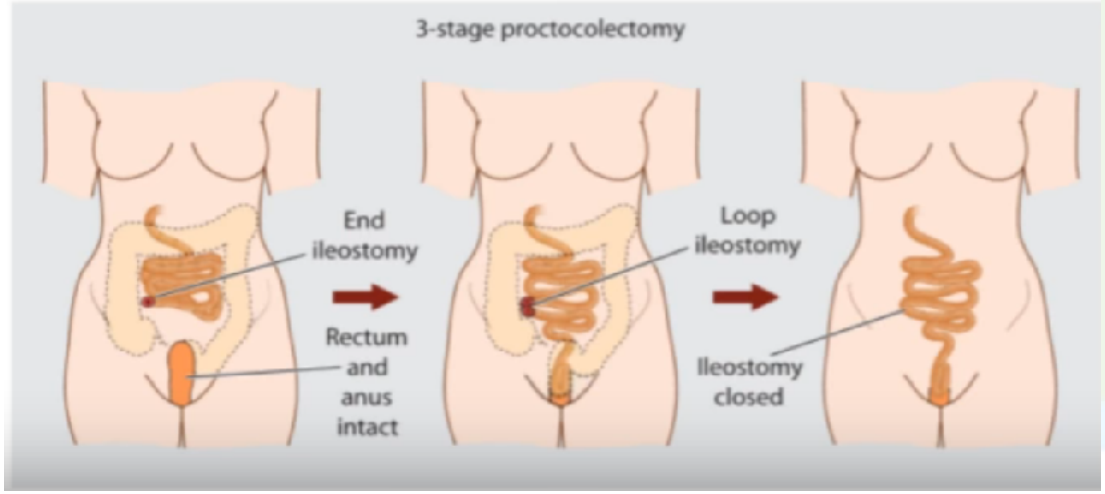
Chirurgie bei CED

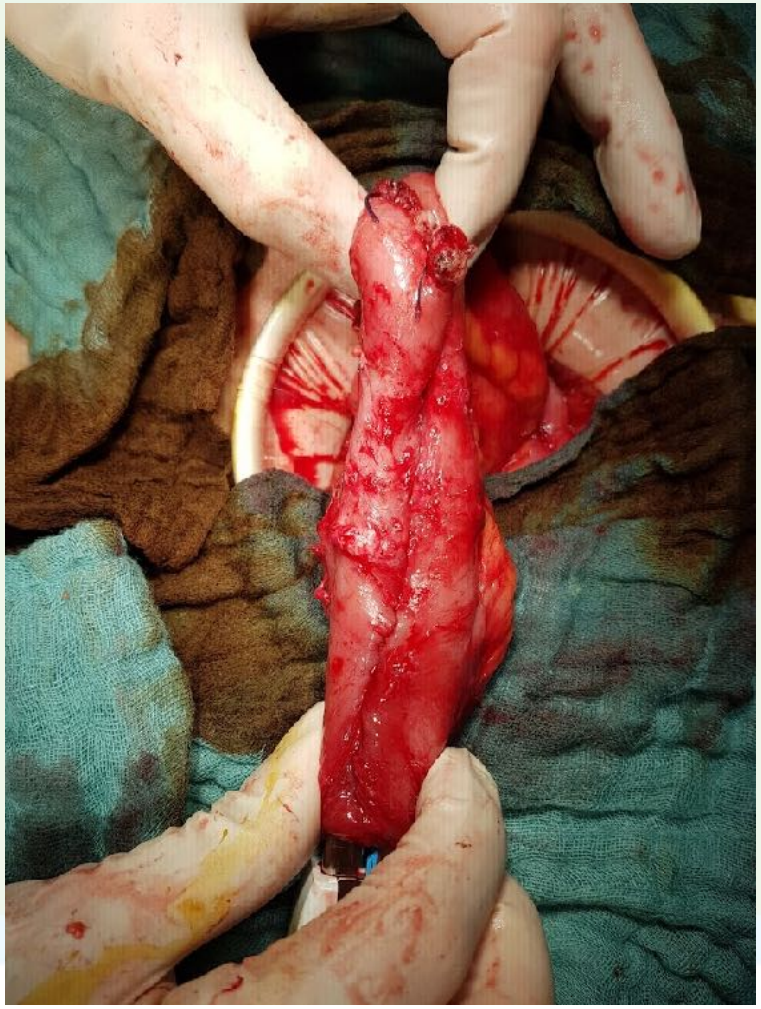
St. Joseph Krankenhaus
Berlin Tempelhof

Colitis ulcerosa

Restaurative Proktokolektomie mit Pouch







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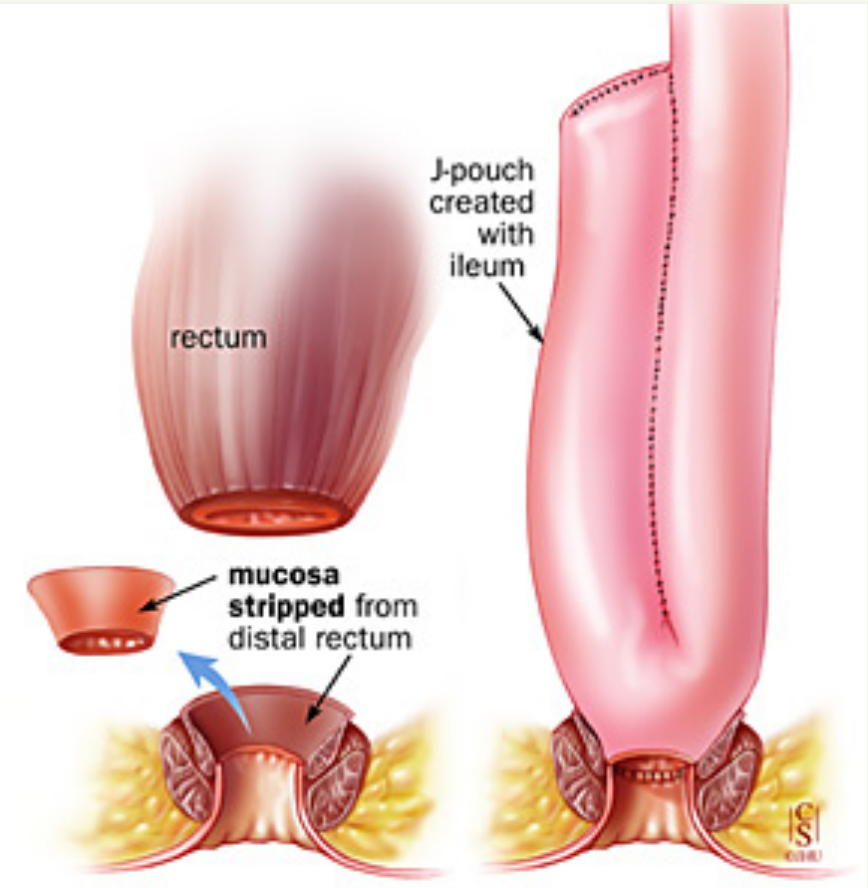
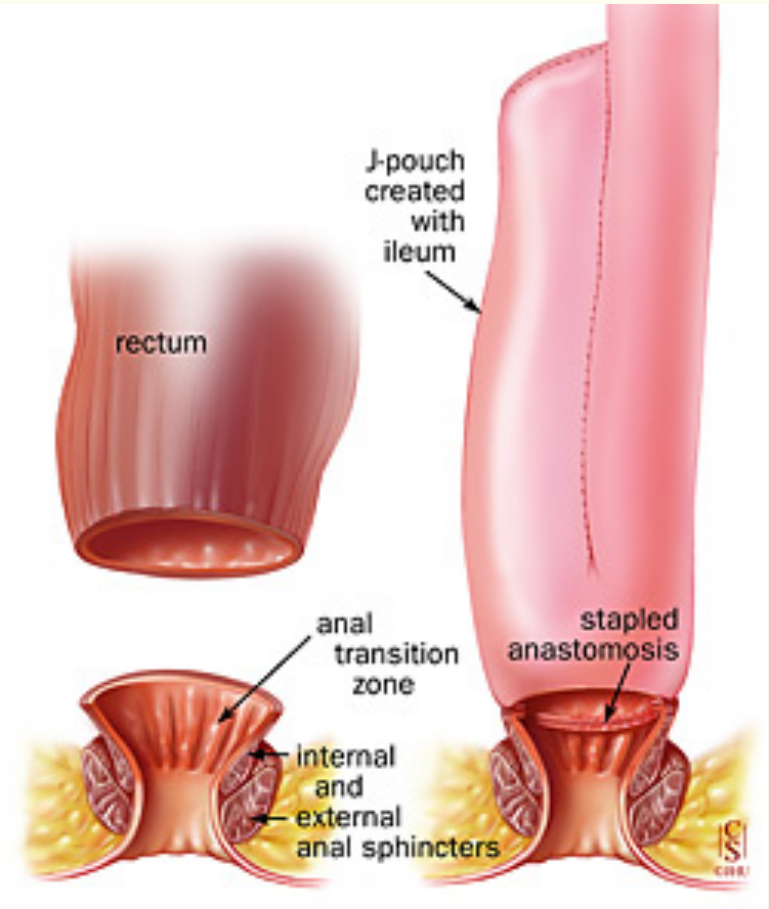
Colitis ulcerosa – Handnaht vs. Stapler



Mukosektomie



Anale Transitionalzone

Chirurgie bei CED

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Colitis ulcerosa

Morbus Crohn

Chirurgie bei CED

St. Joseph Krankenhaus
Berlin Tempelhof

Morbus Crohn – Ileozökalbefall

Laparoscopic ileocaecal resection versus infliximab for terminal ileitis in Crohn's disease: a randomised controlled, open-label, multicentre trial

Cyriel Y Ponsioen, E Joline de Groof, Emma J Eshuis, Tjibbe J Gardenbroek, Patrick M M Bossuyt, Ailsa Hart, Janindra Warusavitarne, Christianne J Buskens, Ad A van Bodegraven, Menno A Brink, Esther C J Consten, Bart A van Wagensveld, Marno C M Rijk, Rogier M P H Crolla, Casper G Noomen, Alexander P J Houdijk, Rosalie C Mallant, Maarten Boom, Willem A Marsman, Hein B Stockmann, Bregje Mol, A Jeroen de Groof, Pieter C Stokkers, Geert R D'Haens, Willem A Bemelman, on behalf of the LIR!C study group*

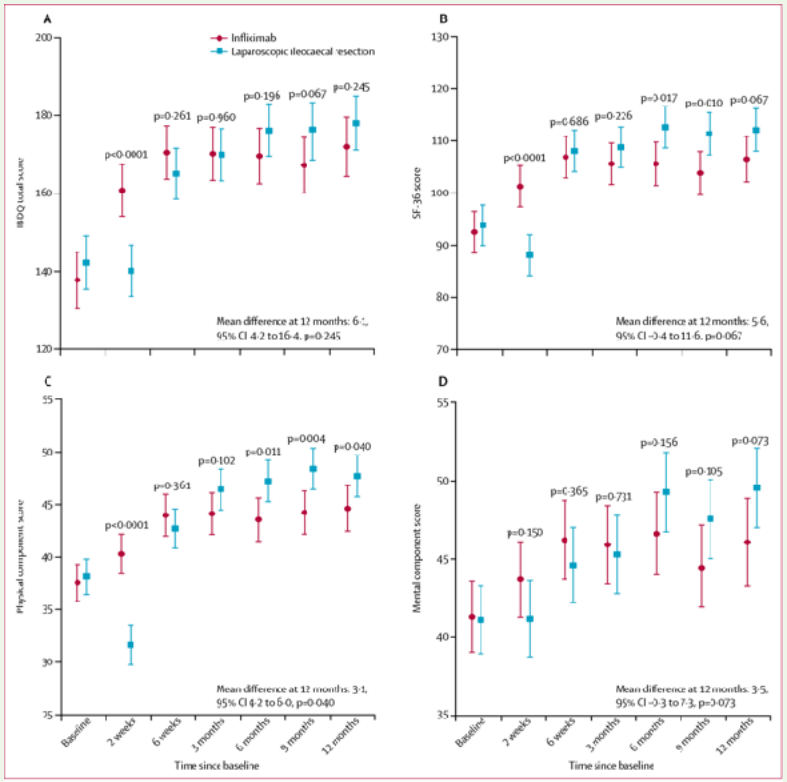
	Infliximab (n=65)	Laparoscopic ileocaecal resection (n=70)
Total	2 (3%)	8 (11%)
Pneumonia	1 (2%)	0
Perianal abscess	1 (2%)	0
Ileus	0	3 (4%)
Anastomotic leakage	0	3 (4%)
Intra-abdominal abscess or haematoma*	0	2 (3%)

Data are n (%). *One patient with an anastomotic leakage also developed an intra-abdominal abscess. Difference in total proportion of patients with serious adverse events tested with Fisher's exact test (p=0·10).

Table 3: **Primary treatment-related serious adverse events in the per-protocol population**

	Remission
Chirurgie	79%
Infliximab	84%

Follow-up: 7 – 18 Mo



- Median folllow-up 48 Monate:
  - OP bei 37% der Infliximab-Patienten
  - Infliximab bei 26% der operierten Patienten

[Ponsioen CY, Lancet Gastroenterol Hepatol. 2017]

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Morbus Crohn – Ileozökalbefall

LIR!C Trial
Median folllow-up 63,5 Monate (134 Patienten)

Resektionsgruppe (n=69):
- TNFalpha-Therapie bei 26%
- Keine Crohn-spezifische Therapie bei 22%
- Sekundärprophylaxe mit Immunmodulatoren bei 20%
- Kein weiterer chirurgischer Eingriff

Infliximab-Gruppe (n=65):
- Chirurgische Therapie bei 48%
- Fortsetzung/ Wechsel/ Eskalation der Biologika-Therapie bei 52%

[Stevens TW, Lancet Gastroenterol Hepatol. 2020]

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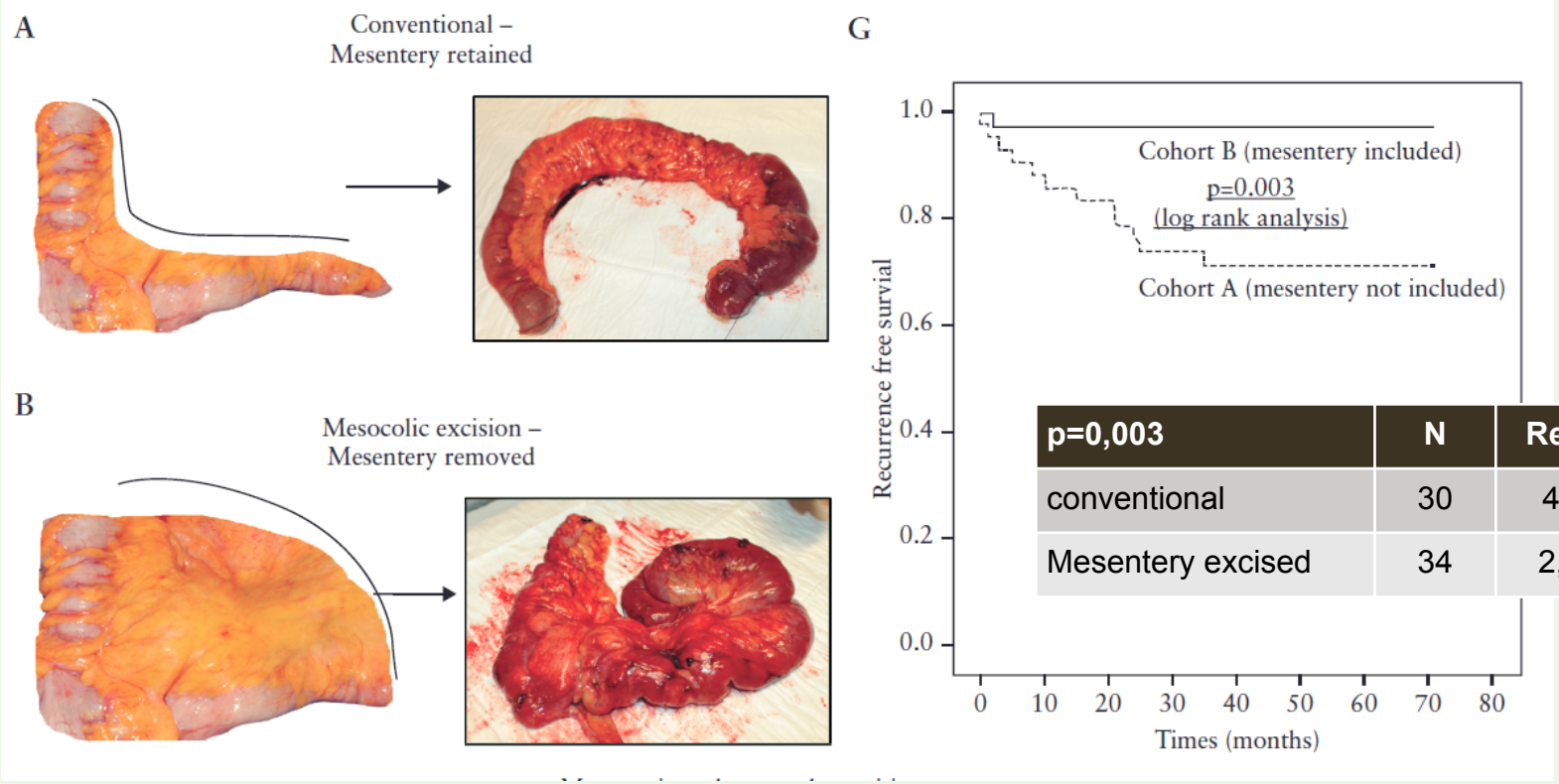
Morbus Crohn – Darmwandnahe Skelettierung

Gruppe A (n=30), 2004-2010, konsekutive ICR, Follow-up 70 Mo
Gruppe B (n=34), nach 2010, konsekutive ICR, Follow-up 51 Mo



p=0,003	N	Re-OP
conventional	30	40%
Mesentery excised	34	2,9%

[Coffey CJ, J Crohn‘s Colitis 2018]

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Chirurgie bei CED

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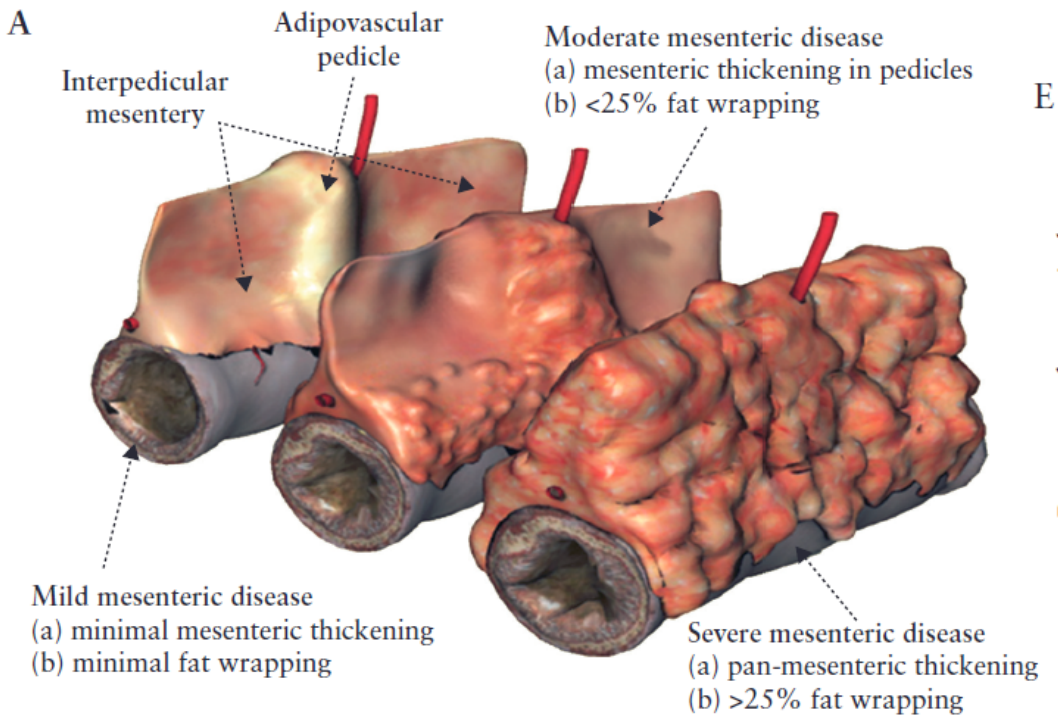
Morbus Crohn – Darmwandnahe Skelettierung



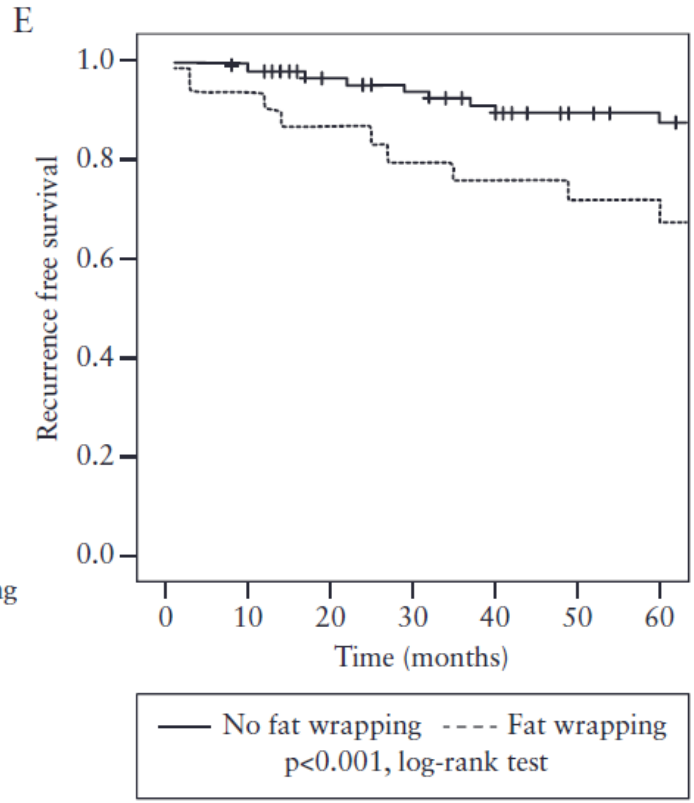


Table 4. Multivariable analysis of association between clinico-histopathological features and development of recurrence requiring surgical intervention.

Variable	HR	95% CI	*P*-value
Non-stricturing/non-penetrating phenotype	0.764	0.241–2.428	0.649
Penetrating phenotype	2.729	0.772–9.649	0.119
Fat wrapping	4.722	1.713–13.017	0.003

[Coffey CJ, J Crohn‘s Colitis 2018]

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Morbus Crohn – Anastomosenkonfiguration

World J Surg (2013) 37:893–901
DOI 10.1007/s00268-013-1928-6

World Journal of Surgery

Comparing Outcomes Between Side-to-Side Anastomosis and Other Anastomotic Configurations After Intestinal Resection for Patients with Crohn's Disease: A Meta-Analysis

Zhen Guo · Yi Li · Weiming Zhu · Jianfeng Gong · Ning Li · Jieshou Li

- Meta-Analyse 11 Studien (n=1.175)
  - Kein Unterschied bei Anastomoseninsuffizienz
  - Kein Unterschied bei anderen Komplikationen
  - Kein Unterschied bei Rezidiv (endoskop./ symptomatisch)
  - Kein Unterschied bei Re-OP wegen Rezidiv

[Guo Z, World J Surg 2013]

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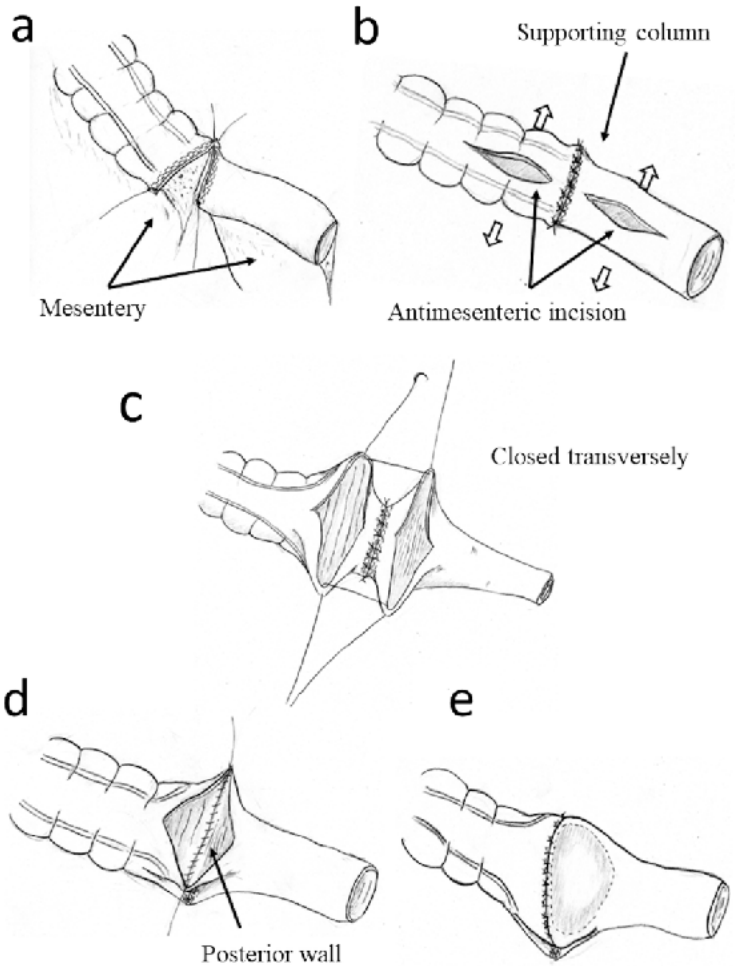
Morbus Crohn – Kono-S-Anastomose



	Kono-S (n=117)	End-zu-End (n=98)
Anastomotic surgical recurrence	3,4%	24,4%
Anastomotic leakage	5,1%	17,3%
5-year surgery-free survival rate	95%	81,3%

median follow-up: 54 Monate

[Shimada N, J Gastrointestinal Surg 2019]

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Morbus Crohn – Kono-S-Anastomose

	Kono-S (n=36)	Stapled side-to-side (n=43)	p-value
Endoskop. Rezidiv (Rutgeerts score > i2) nach 6 Mo	22,2%	62,8%	<0,001
Endoskop. Rezidiv (Rutgeerts score > i3) nach 6 Mo	13,8%	34,8%	0,03
Klin. Rezidiv nach 12 Mo	8%	18%	0,02
Klin. Rezidv nach 24 Mo	18%	30,2%	0,04
OP-pflichtiges Rezidiv nach 24 Mo	0%	4,6%	0,3

[Luglio G, Ann Surg 2020]

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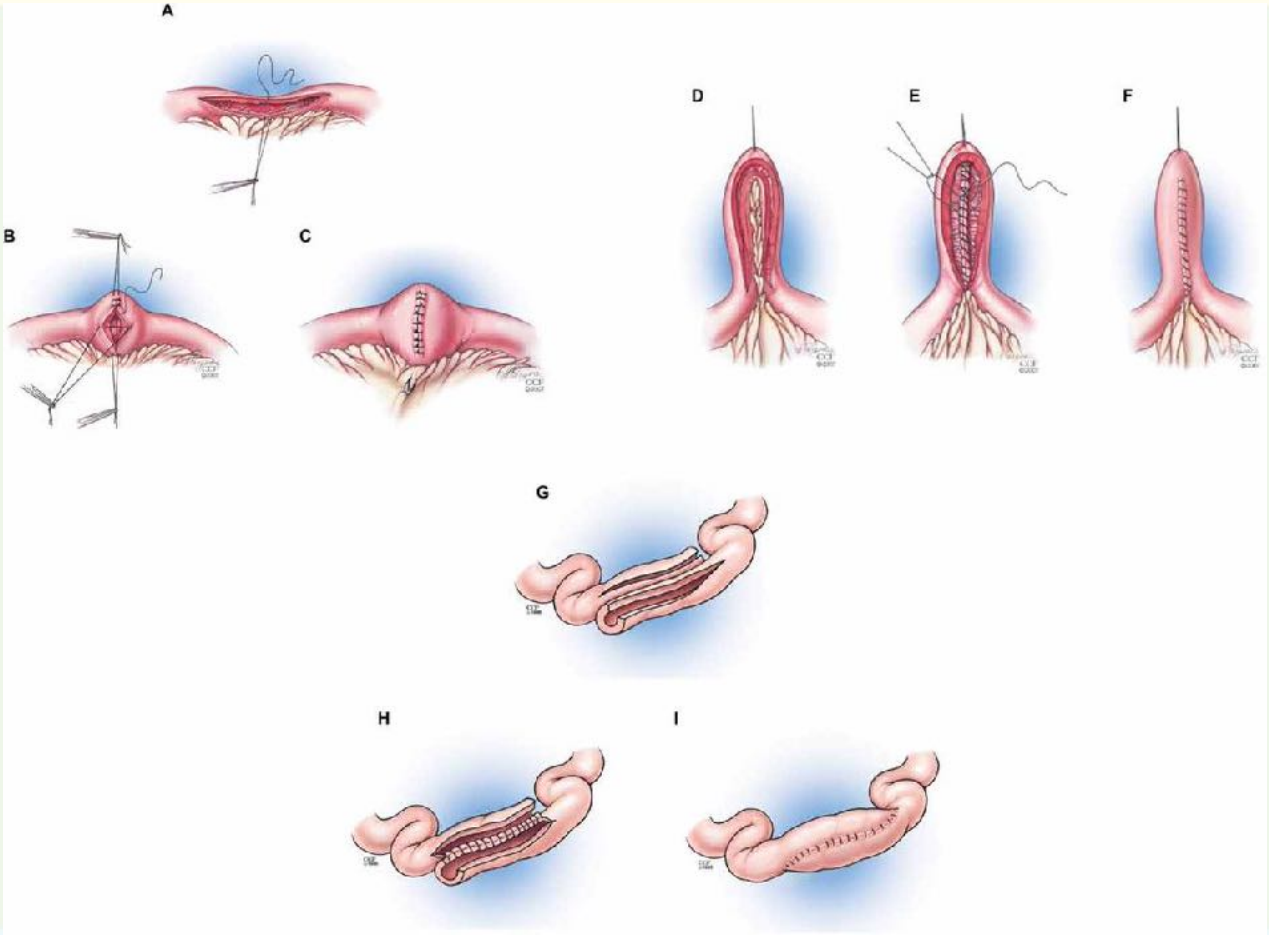
Morbus Crohn – Strikturoplastik



Rezidivraten:
1,2% nach 2 Jahren
12,7% nach 5 Jahren
25,7% nach 10 Jahren

[Rotolli M, J Crohn‘s Colitis 2019]

Chirurgie bei CED

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Morbus Crohn - Einfluss von Biologika

Table 3. Main characteristics and outcomes analyzed of prospective studies that outlined the possible effect of anti-TNF agents and an increase in postoperative complications after major abdominal surgery in CD.

Study	Journal	Disease	Type of study	Main outcomes analyzed	Type of agents used	Patients (cohort/ treated)	Association anti-TNF/ complications
Lau *et al.*[24]	*Ann Surg*	CD UC	Prospective single center	Overall postoperative complications	IFX ADA CER	217/150	Yes
Brouquet *et al.*[25]	*Ann Surg*	CD	Prospective study multicenter	Overall postoperative complications	Anti-TNF	592/143	Yes
Uchino *et al.*[41]	*Dis Colon Rectum*	CD	Prospective single center	Postoperative surgical site infections	IFX	405/79	No
Fumery *et al.*[26]	*Am J Gastroenterol*	CD	Prospective multicenter	Early overall postoperative complications	IFX ADA	209/93	No
El-Hussuna *et al.*[9]	*BMC Surg*	CD UC	Prospective multicenter	Primary outcome: The change in concentration of immunological biomarkers of the surgical stress response. Secondary outcome: postoperative complications	IFX ADA CER	46/18	No
Cohen *et al.*[27]	*DDW 2019*	CD UC	Prospective multicenter	Postoperative infections after intra-abdominal surgery.	Anti-TNF	995/382	No

ADA, adalimumab; CD, Crohn's disease; CER, certolizumab pegol; IFX, infliximab; TNF, tumor necrosis factor; UC, ulcerative colitis; VDZ, vedolizumab.

[Quaresma AB, Ther Adv Gastroenterol 2020]

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Morbus Crohn - Einfluss von Biologika

European Crohn's and Colitis Organisation

ECCO Statement 7J

Whether there is a higher rate of postoperative complications from abdominal surgery during or after anti-TNF therapy remains controversial [EL3]

[Bemelman WA, J Crohn's Colitis 2018]

Statement 4.3. ECCO CD Treatment GL [2019]

Current evidence suggests that preoperative treatment with anti-TNF therapy [EL3], vedolizumab [EL4], or ustekinumab [EL4] does not increase the risk of post operative complications in patients with CD having abdominal surgery. Cessation of these medications prior to surgery is not mandatory.

[Adamina M, J Crohn's Colitis 2020]

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Morbus Crohn - Einfluss von Biologika

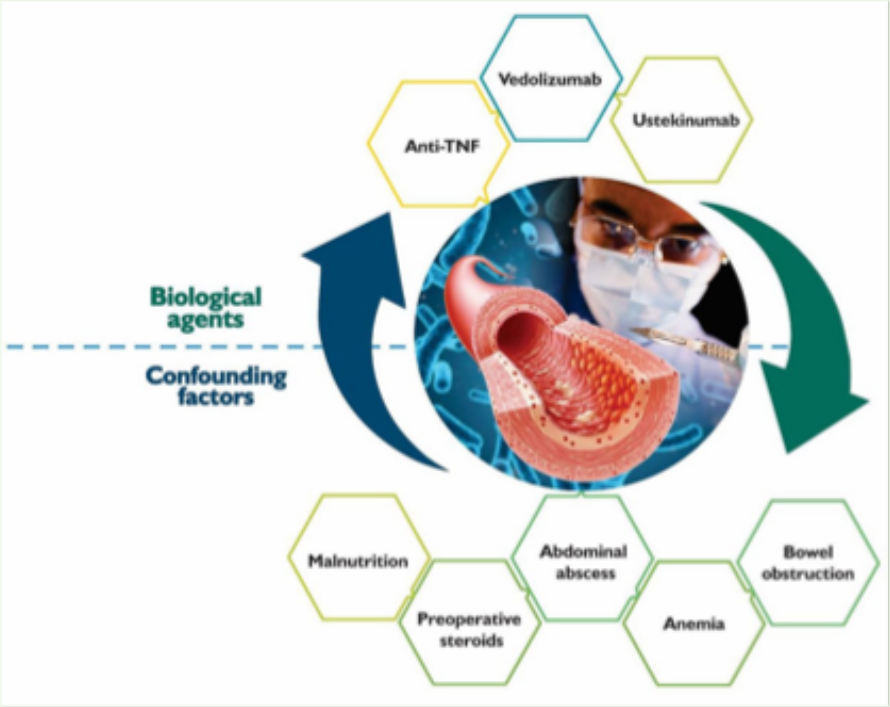

Figure 1. Biological agents approved for the management of Crohn's disease (CD) and other factors that are involved in an increase in postoperative complications after abdominal surgical procedures in CD. Despite biological agents not directly affecting complications, their use is usually associated with more severe cases with the described confounding factors.

[Quaresma AB, Ther Adv Gastroenterol 2020]

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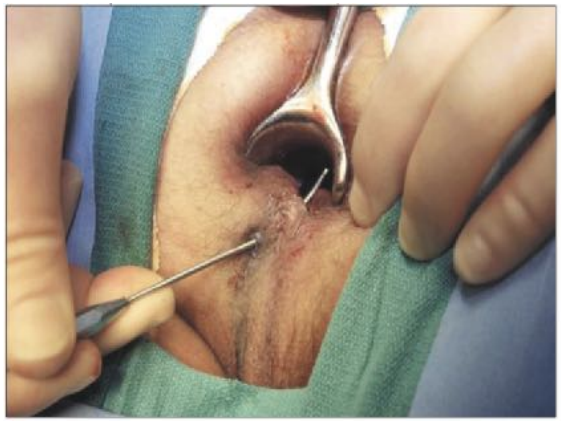
Morbus Crohn – differenzierte Fisteltherapie



Chirurgie bei CED

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Morbus Crohn – perianale Fisteltherapie

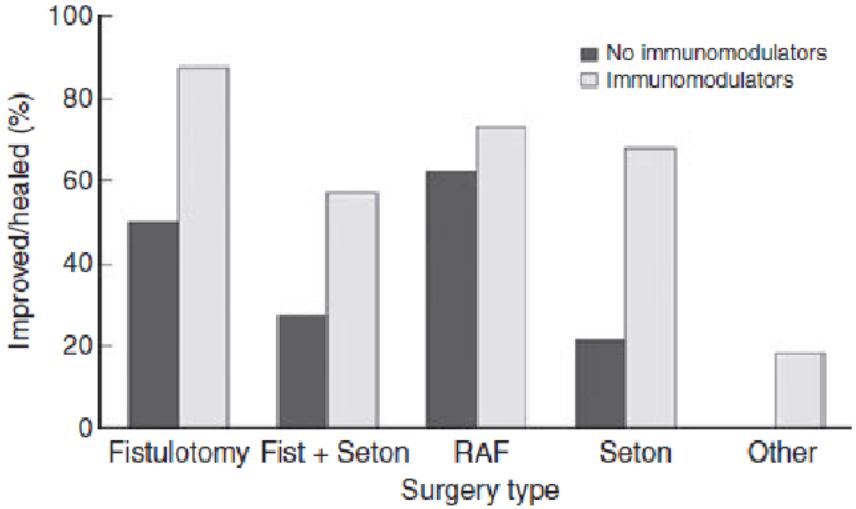
Interdisziplinär: Gastroenterologie ⟷ Chirurgie

Original article doi:10.1111/j.1463-1318.2012.02944.x

Biological immunomodulators improve the healing rate in surgically treated perianal Crohn's fistulas

G. El-Gazzaz, T. Hull and J. M. Church
Department of Colorectal Surgery, Digestive Disease Institute, Cleveland Clinic, Cleveland, Ohio, USA

Received 12 September 2011; accepted 5 December 2011; Accepted Article online 17 January 2012



[El-Gazzaz G, Colorectal Dis. 2012]

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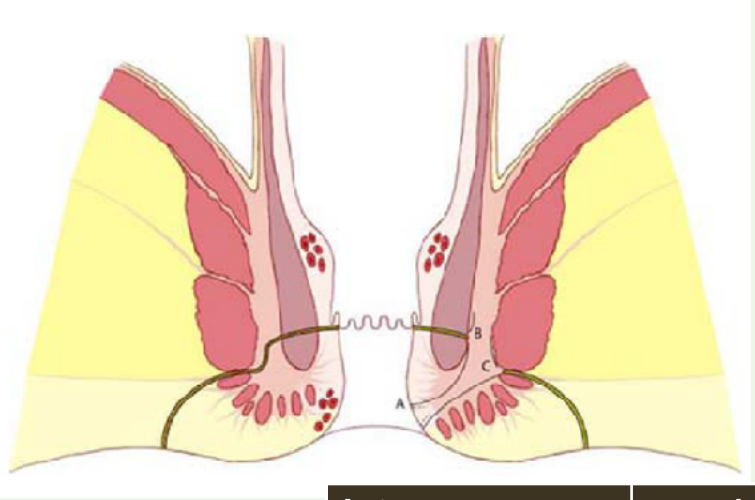
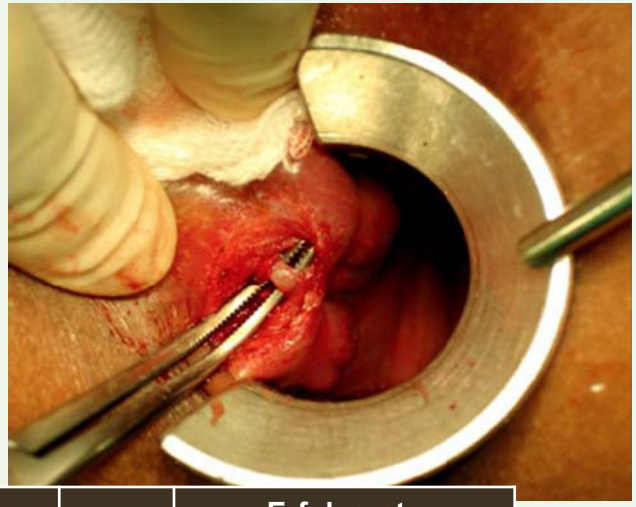
Morbus Crohn – perianale Fisteltherapie

LIFT – **L**igation of the **I**ntersphincteric **F**istulous **T**ract





Autor	Jahr	n	Erfolgsrate
Sileri et al.	2014	26	73%
Gingold et al.	2014	14	53%
Kaminski et al.	2017	23	48%
Gold et al.	2018	20	50%

[Rojanasakul A, Tech Coloproctol 2009]

Chirurgie bei CED

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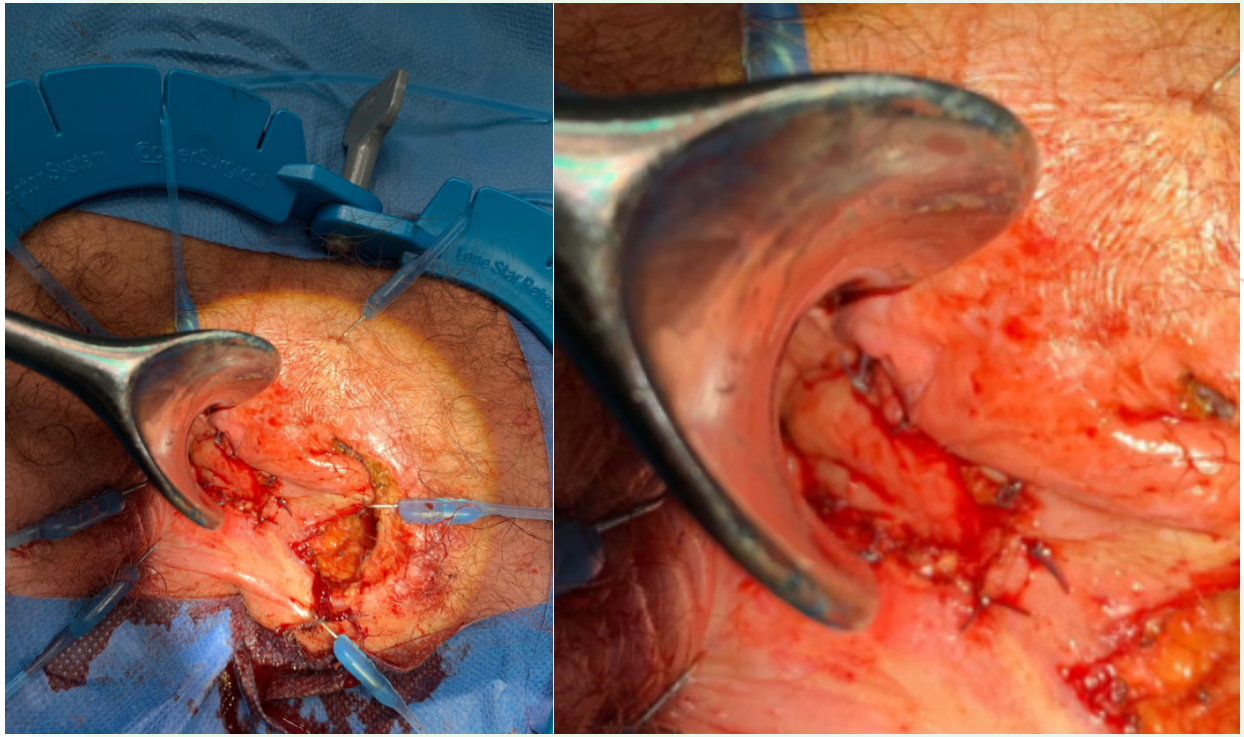
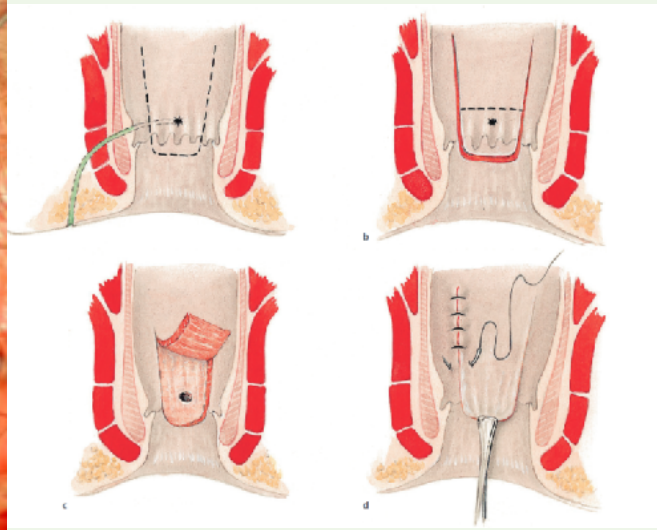
Morbus Crohn – perianale Fisteltherapie

Verschiebelappenplastik (Mukosa-Muskel-Flap)





- Erfolgsraten ~70%
- Inkontinenz ~10 %

[Soltani A, Dis Colon Rectum 2010]

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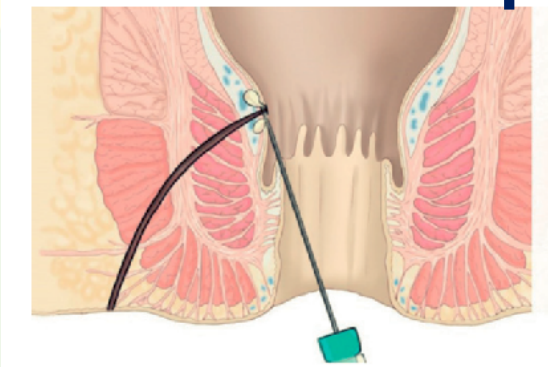
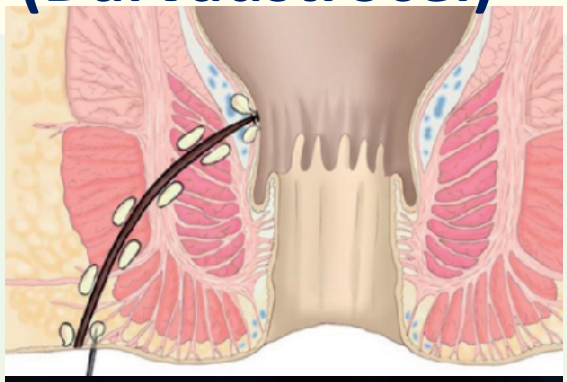
Morbus Crohn – perianale Fisteltherapie

Mesenchymale Stammzelltherapie (Darvadstrocel)





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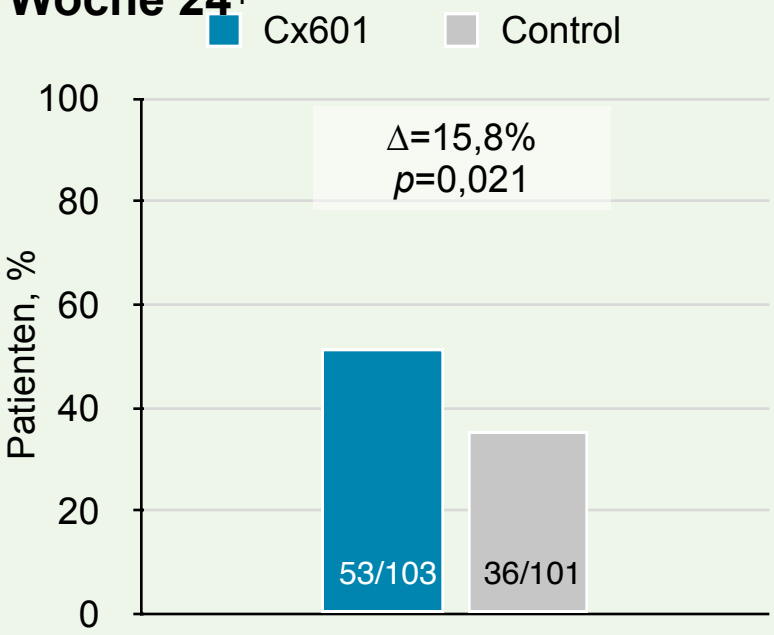
Morbus Crohn – perianale Fisteltherapie

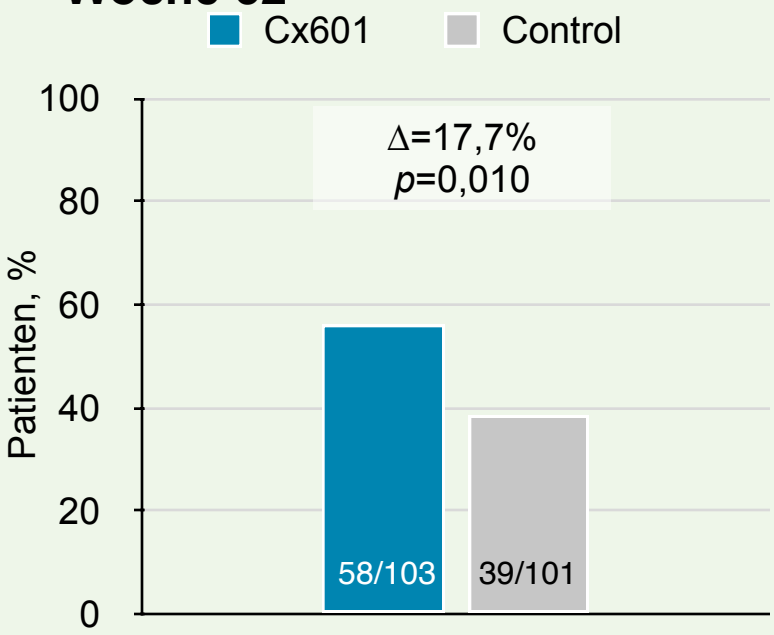
Mesenchymale Stammzelltherapie

Komb. Remission

Woche 24[1]



Woche 52[2]



[1Panés J, Lancet 2016]
[2Panés J, Gastroenterology 2018]

Chirurgie bei CED

St. Joseph Krankenhaus
Berlin Tempelhof

Zusammenfassung

- C. ulcerosa
  - Standard: restaurative Proktokolektomie mit J-Pouch
  - elektiv: 2-zeitig, Risikokonstellation: 3-zeitig
  - Stapler-Anastomose: bessere Inkontinenz
- M. Crohn:
  - Neu:
    - Kono-S-Anastomose
    - Erweiterte mesenterische Resektion
    - mesenchymale Stammzelltherapie
- Einfluss Biologika auf postoperatives Outcome weniger kritisch, CAVE: Begleitumstände (Malnutrition etc.)

Elisabeth Vinzenz Verbund

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Was gibt es Neues aus der Chirurgie?

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am St. Joseph Krankenhaus Berlin Tempelhof

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