

Ileostomie e Colostomie

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Napoli
SURGERY

NAPOLI 27 - 28 SETTEMBRE

Aula Magna Scuola di Medicina di Scampia
Centro Congressi Università degli Studi di Napoli Federico II
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CON IL PATROCINIO DI:



Definizione:

La stomia o stoma (“bocca”) è l'abboccamento temporaneo o definitivo di un viscere alla superficie cutanea con l'obiettivo di:

- permettere la fuoriuscita del contenuto viscerale
- introdurre sostanze a fini nutrizionali o terapeutici

Classificazione:

Le stomie possono essere divise in base a questi criteri:

- Tipo
- Durata
- Scopo
- Organo coinvolto

Tipo:

- **TERMINALE** il viscere viene direttamente abboccato all'esterno interrompendo qualsiasi continuità con la porzione del viscere a valle
- **LATERALE o A CANNA DI FUCILE** sia il moncone afferente che l'efferente vengono abboccati alla cute

Durata:

- **TEMPORANEA** quando la stomia è solo di “protezione” ed il transito verrà ripristinato una volta risoltasi la causa che l’ha imposta
- **DEFINITIVA** quando il tratto a valle non è più riutilizzabile

Scopo:

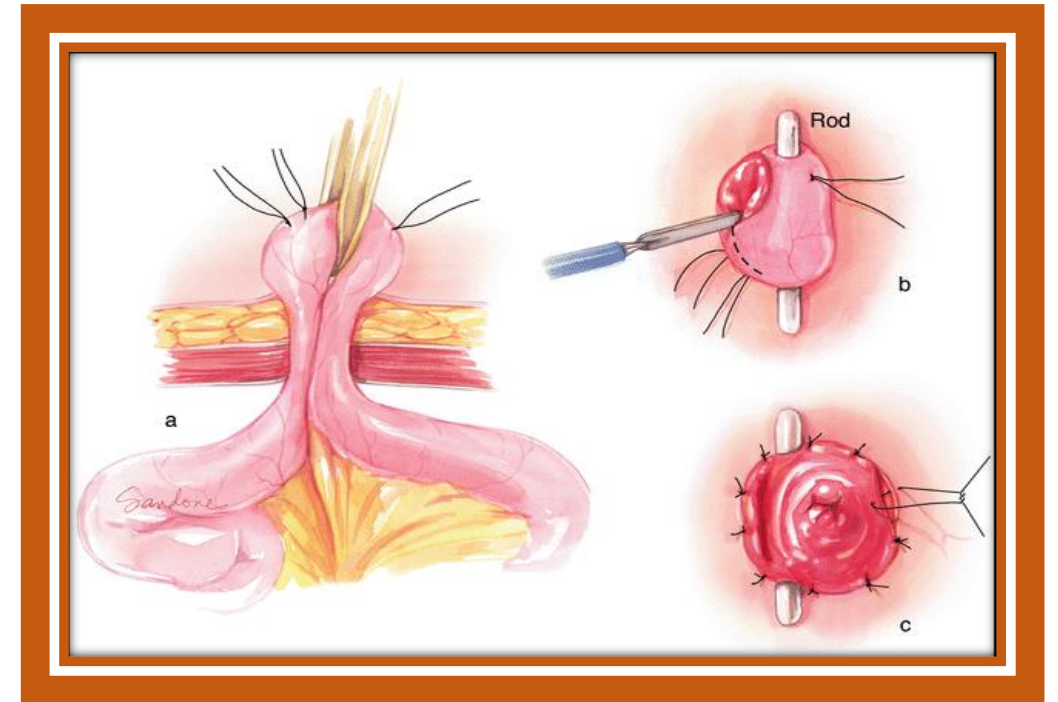
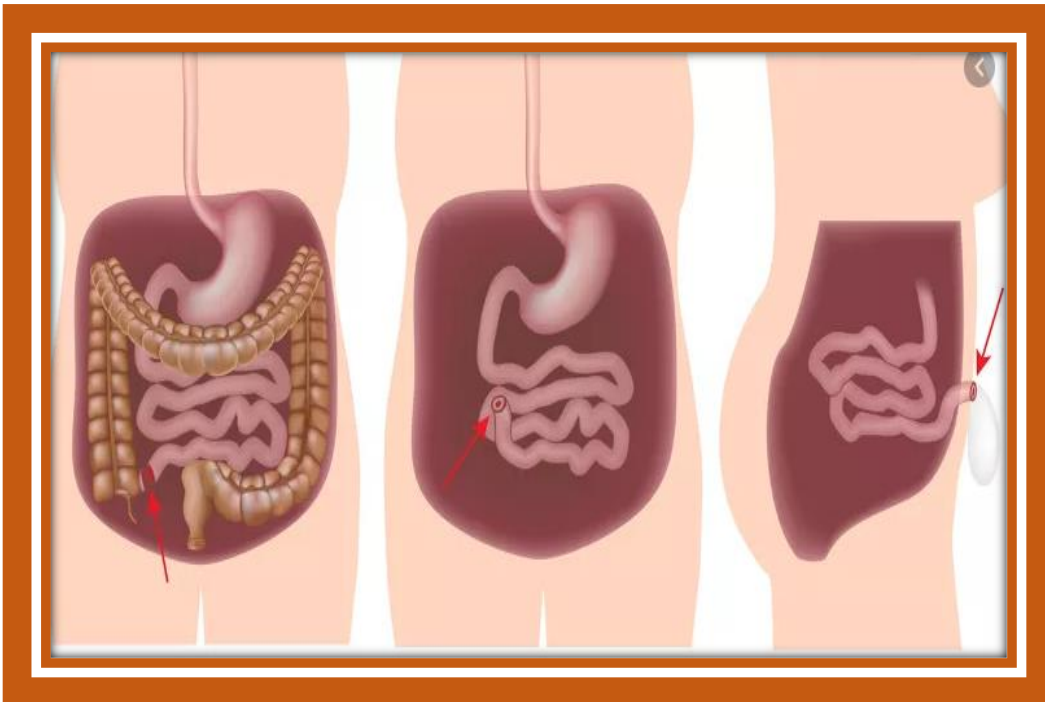
- **PALLIATIVO** es. nei tumori inoperabili dell'intestino
- **DI NECESSITA'** in alcuni tipi di intervento dove bisogna asportare la parte finale dell'intestino
- **DI PROTEZIONE** tiene "a riposo" il tratto dell'intestino a valle della stomia favorendo così i processi di guarigione e di cicatrizzazione

Organo coinvolto:

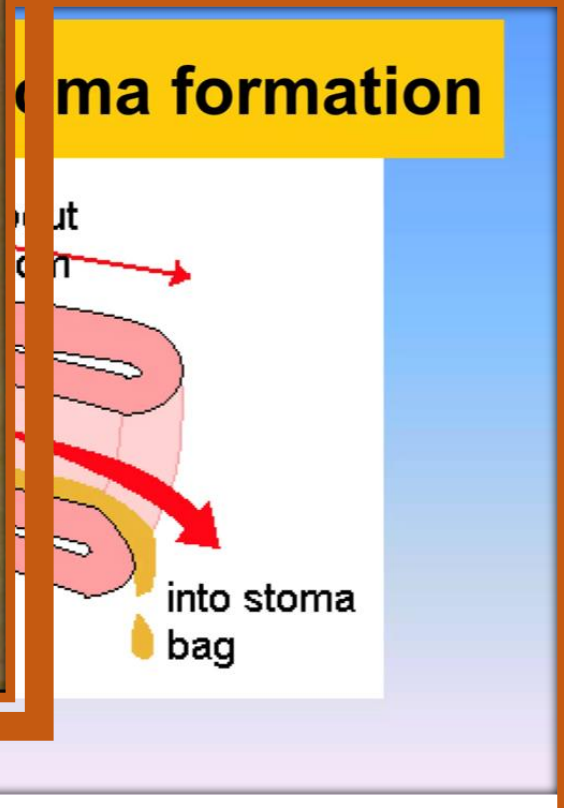
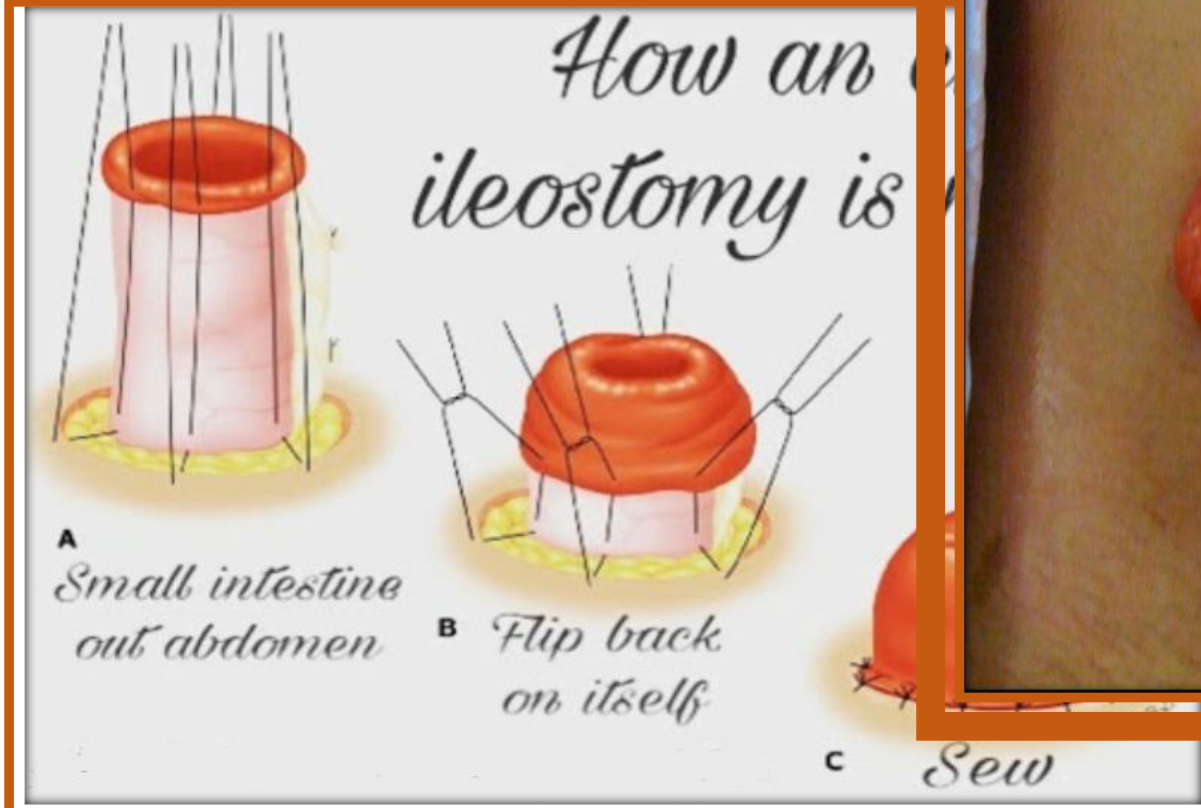
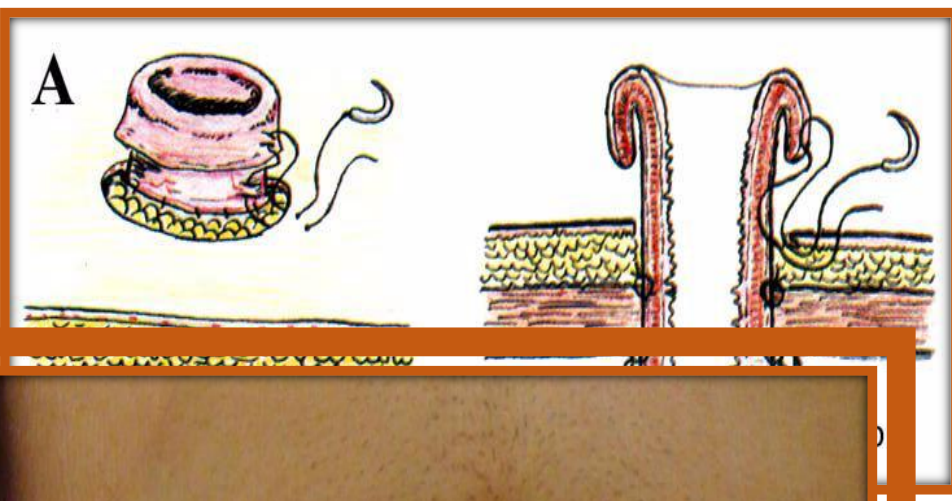
- **ILEO** (ileostomia)
- **COLON** (colonstomia)
- **VIE URINARIE** (urostomia)

Ileostomia:

- L'ileostomia è un'apertura creata chirurgicamente attraverso la quale il tratto finale dell'intestino tenue viene fatto fuoriuscire sulla superficie dell'addome.
- consente una nuova via di uscita delle feci lasciando a riposo la parte dell'intestino danneggiato o non in grado di funzionare.



Ileostomia Terminale:



Ileostomia Laterale:

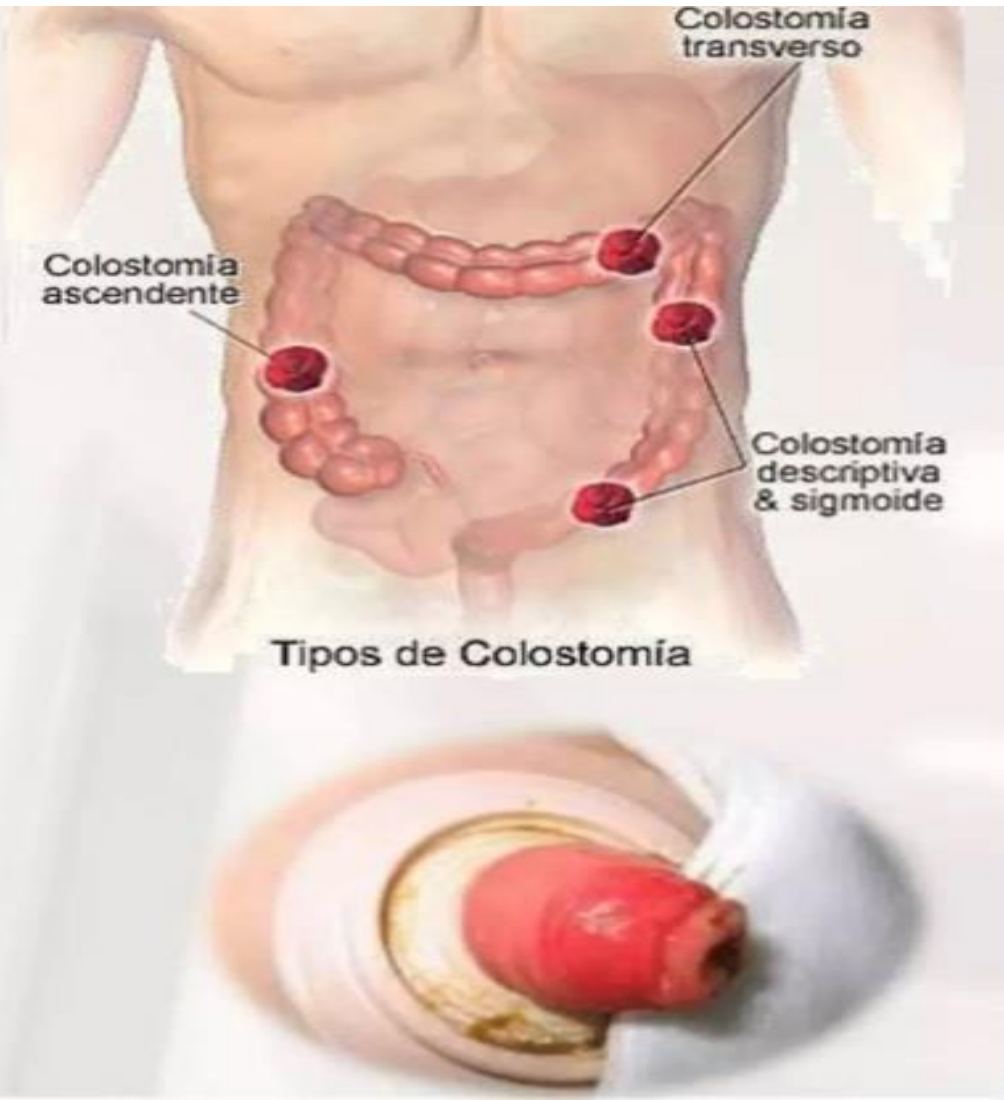


Fisiopatologia delle ileostomie:

- Comincia a funzionare in 2^a - 3^a giornata con evacuazioni continue, liquide, verdastre di 500 - 1500 ml/die
- In 10^a giornata si riducono a 600 ml/die e la consistenza diventa poltacea
- Dopo la stabilizzazione il numero delle scariche meno frequente (si arriva anche a 3 - 4 /die)
- Mancando il riassorbimento di liquidi e sali da parte del colon, la conseguenza più evidente è la **disidratazione e la perdita di elettroliti**
- Il transito delle feci è rapido **3 - 8 ore**
- Le feci sono particolarmente aggressive per la presenza di enzimi digestivi ancora attivi
- Le feci dell'ileostomia sono inodori e che la presenza di cattivo odore è spesso indice di infezione batteri

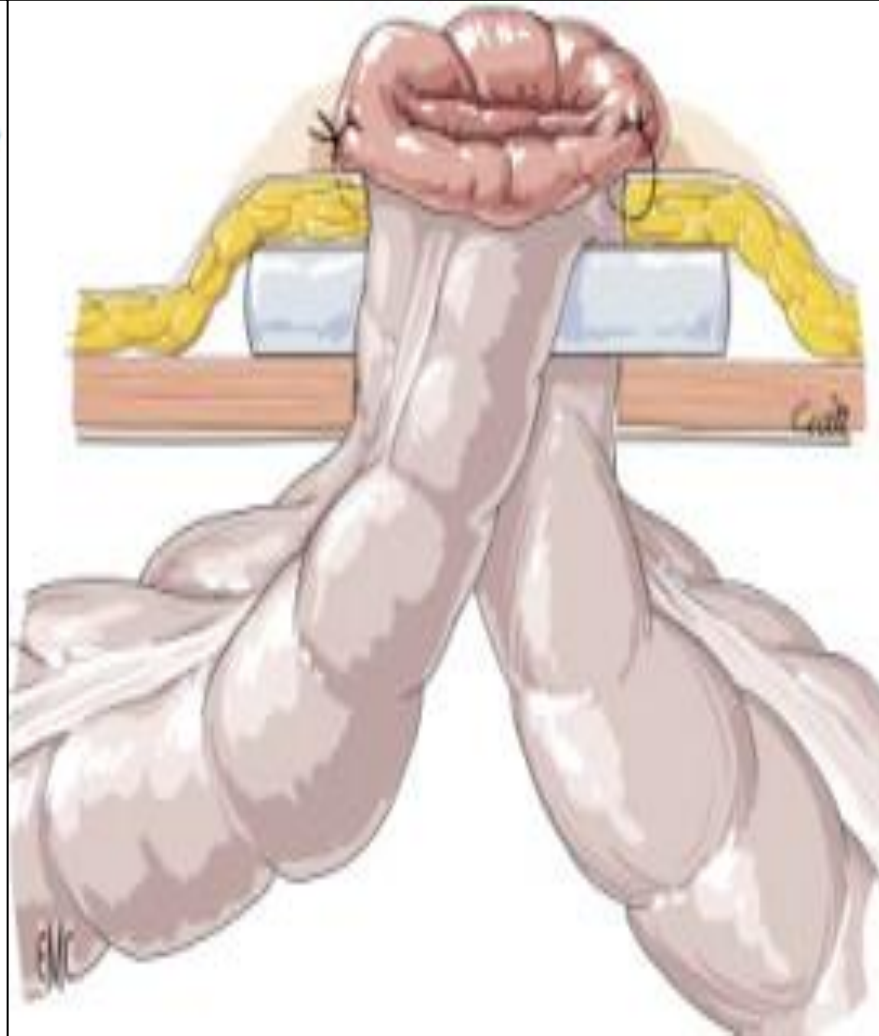
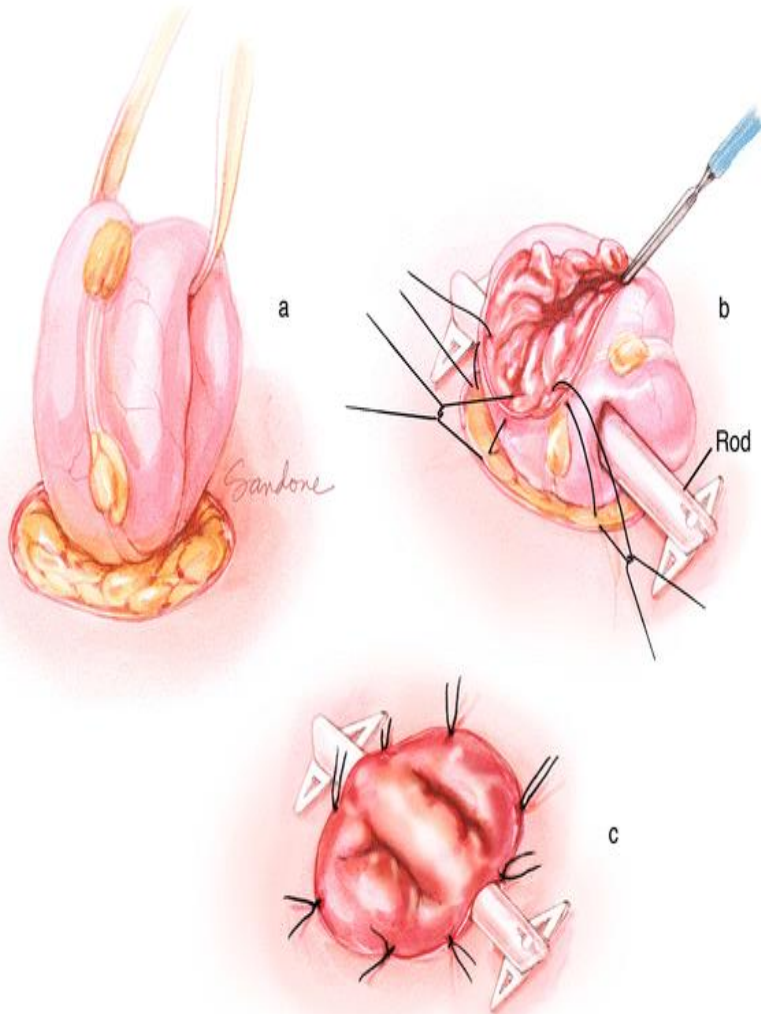
Tipo di feci	Feci normali	Ileostomia recente	Ileostomia stabilizzata
Acqua	100 - 200 ml	1 - 2 litri	500 - 600 ml
Na (mEq)	5	110 - 140	70 - 90
K (mEq)	6 - 12	5 - 15	10 - 15
Cl (mEq)	3 - 5	90 - 120	30 - 40

Colostomie:

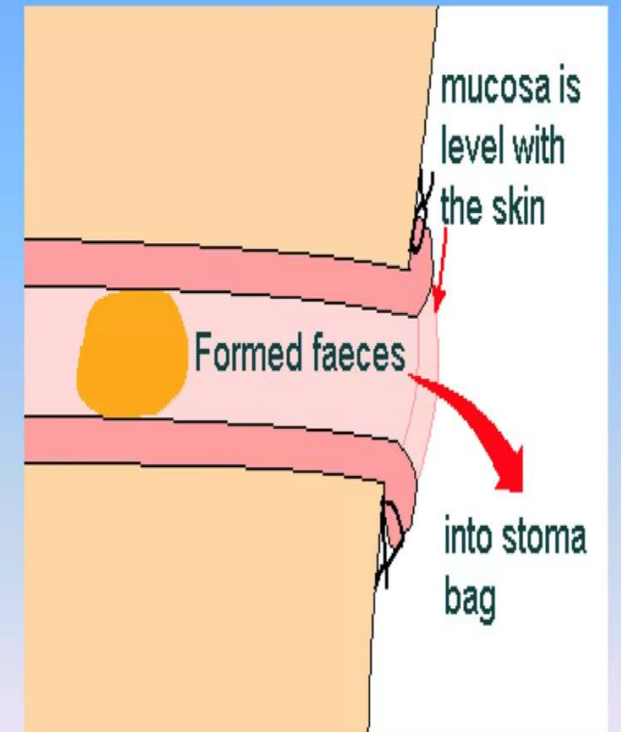


- Ciecostomia
- Colostomia sull'ascendente
- Colostomia trasversa
- Colostomia discendente
- Colostomia sigma

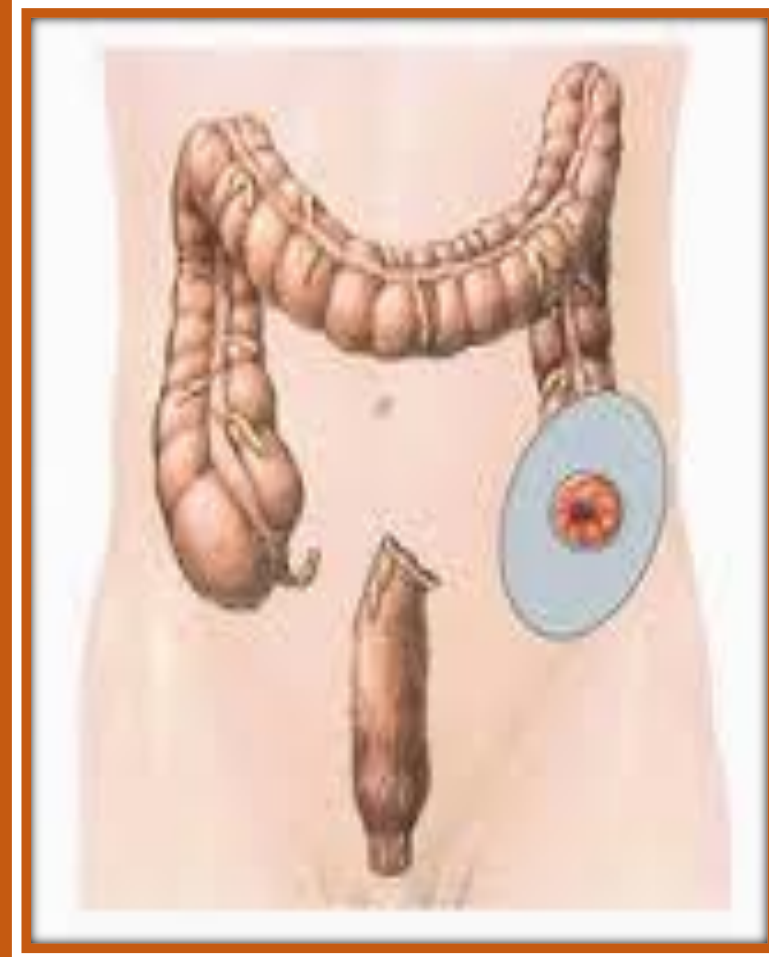
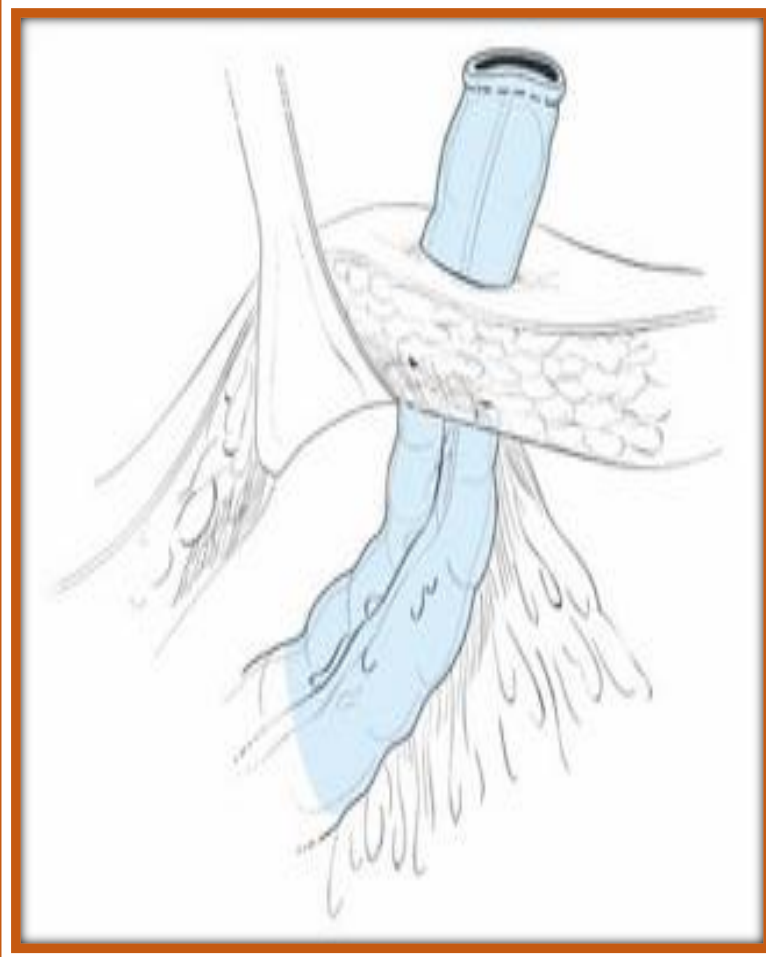
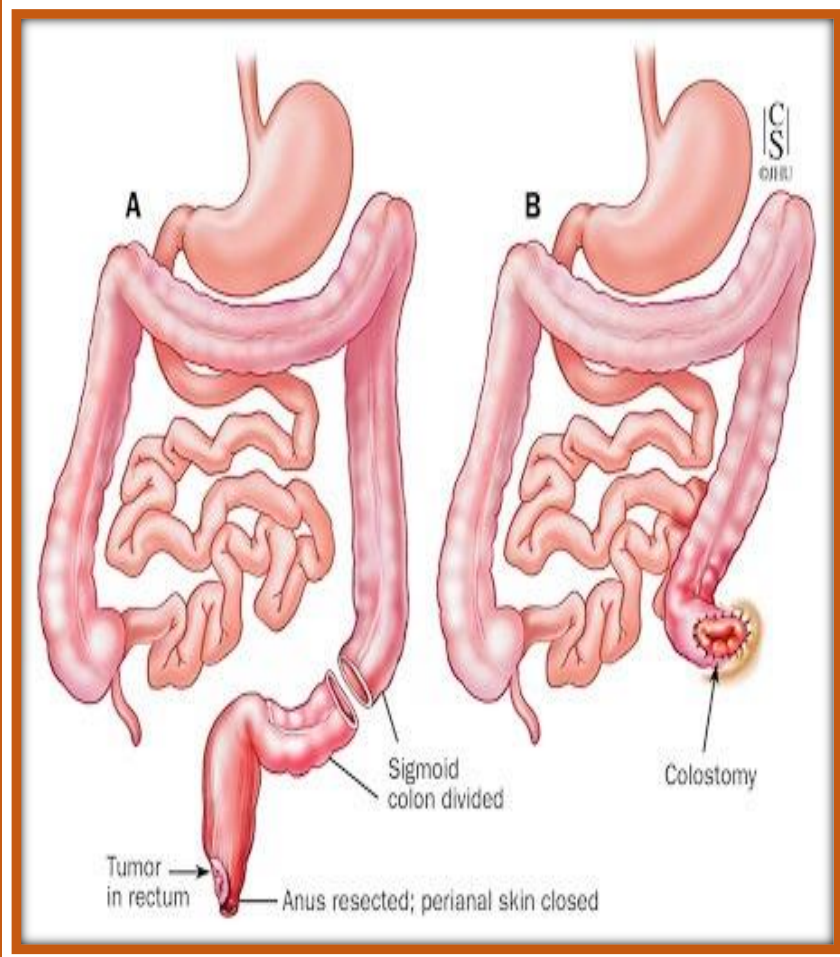
Colostomie Laterali:



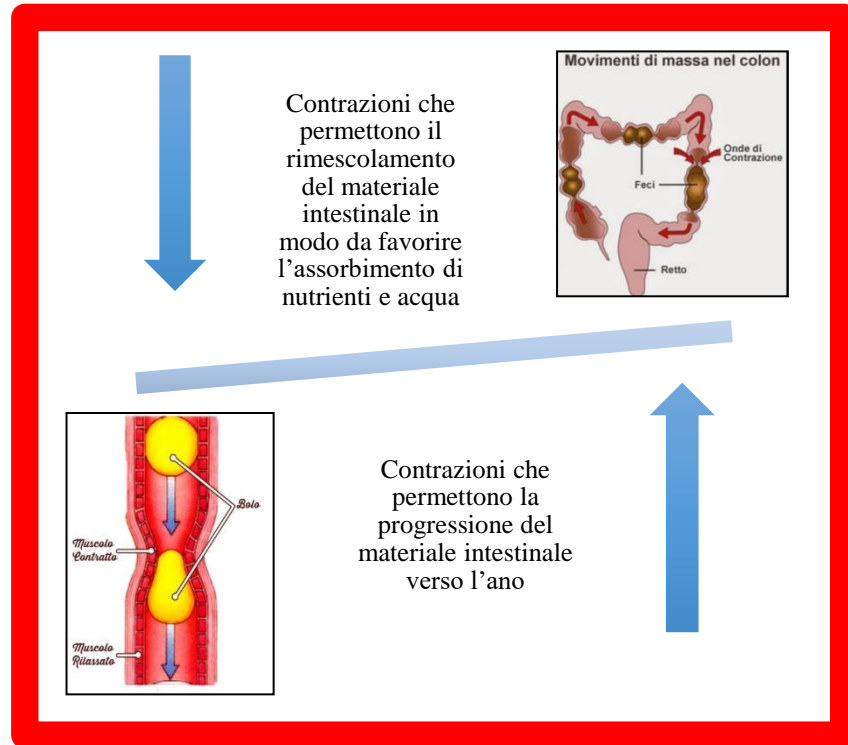
Principles of stoma formation



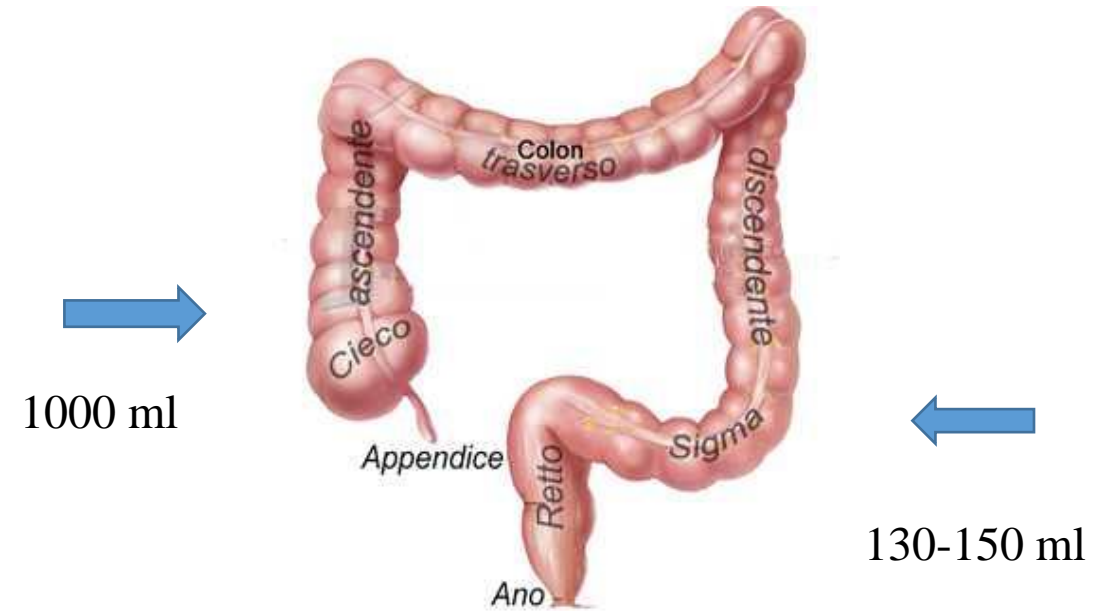
Colostomie Terminali:



Fisiopatologia delle colostomie:



L'assorbimento è tanto più ridotto quanto più la stomia è prossimale



Tempo di transito del bolo alimentare

Tipo di Stomia	Ore
Colostomie destre	2 - 6
Trasversostomie	8 - 10
Sigmoidostomie	12 - 18

Complicanze delle stomie:

Precoci

< 30 gg

- Dermatite peristomale
- Necrosi
- Edema
- Retrazione stomale
- Sanguinamento
- Disidratazione
- Deiscenza mucocutanea

Tardive

>30 gg

- Ernia parastomale
- Prolasso dello stoma
- Sanguinamento dello stoma
- Occlusione intestinale
- Fistole-ascessi

The incidence of stoma related morbidity – a systematic review of randomised controlled trials

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ABSTRACT

INTRODUCTION Several stoma related complications can occur following ileostomy or colostomy formation. The reported incidence of these conditions varies widely in the literature. A systematic review of randomised controlled trials reporting the incidence of stoma related complications in adults was performed to provide the most comprehensive summary of existing data.

METHODS PubMed, CINAHL[®] (Cumulative Index to Nursing and Allied Health Literature) and the Cochrane Library were searched for trials assessing the incidence of complications in adults undergoing conventional stoma formation. Data were extracted by two independent reviewers and entered into SPSS[®] for statistical analysis. The Cochrane Collaboration tool for assessing risk of bias was used to critically appraise each study. Cochran's Q statistic and the I² statistic were used to measure the level of heterogeneity between studies.



RESULTS Overall, 18 trials were included, involving 1,009 patients. The incidence of stoma related complications ranged from 2.9% to 81.1%. Peristomal skin complications and parastomal hernia were the most common complications. End colostomy had the highest incidence of morbidity, followed by loop colostomy and loop ileostomy. There were no trials involving patients with end ileostomy. There was a high level of detection bias and heterogeneity between studies.

CONCLUSIONS This systematic review has summarised the best available evidence concerning the incidence of stoma related morbidity. The high level of heterogeneity between studies has limited the accuracy with which the true incidence of each stoma related complication can be reported. Large, multicentre trials investigating homogenous participant populations are therefore required.



Review

Peristomal Skin Complications in Ileostomy and Colostomy Patients: What We Need to Know from a Public Health Perspective

Floriana D'Ambrosio ¹, **Ciro Pappalardo** ¹, Anna Scardigno ¹, Ada Maida ¹, Roberto Ricciardi ² and **Giovanna Elisa Calabrò** ^{1,2,*}

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Abstract: Background: Peristomal skin complications (PSCs) are the most common skin problems seen after ostomy surgery. They have a considerable impact on a patient's quality of life and contribute to a higher cost of care. Methods. A systematic review was conducted, querying three databases. The analysis was performed on international studies focused on the clinical-epidemiological burden of PSCs in adult patients with ileostomy/colostomy. Results: Overall, 23 studies were considered. The main diseases associated with ostomy surgery were rectal, colon and gynecological cancers, inflammatory bowel diseases, diverticulitis, bowel obstruction and intestinal perforation. Erythema, papules, skin erosions, ulcers and vesicles were the most common PSCs for patients with an ostomy (or stoma). A PSCs incidence ranging from 36.3% to 73.4% was described. Skin complications increased length of stay (LOS) and rates of readmission within 120 days of surgery. Conclusions: PSCs data are still limited. A knowledge of their burden is essential to support health personnel and decision-makers in identifying the most appropriate responses to patients' needs. Proper management of these complications plays a fundamental role in improving the patient's quality of life. A multidisciplinary approach, as well as increased patient education and their empowerment, are priority measures to be implemented to foster a value-based healthcare.

Keywords: peristomal skin complications; PSCs; ileostomy; colostomy; ostomy surgery; burden of disease; public health



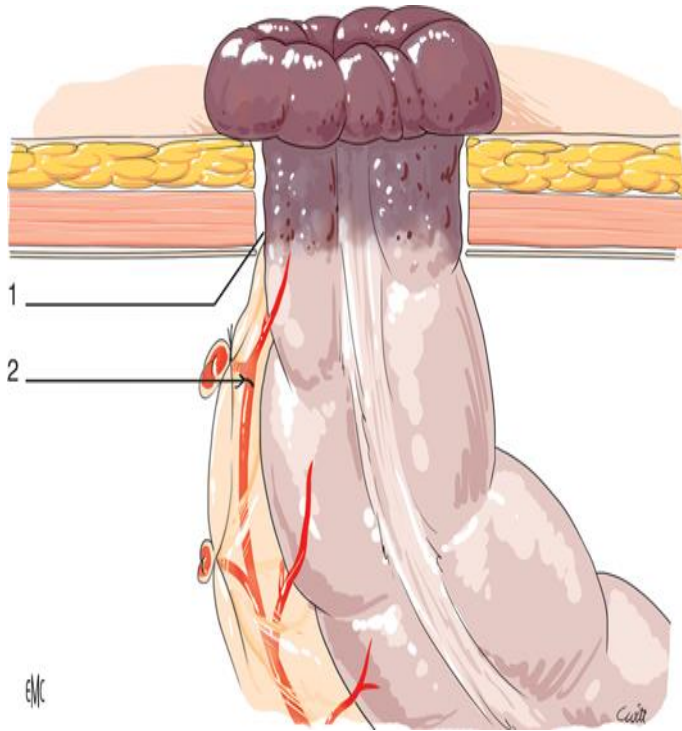
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Citation: D'Ambrosio, F.; Pappalardo, C.; Scardigno, A.; Maida, A.; Ricciardi, R.; Calabrò, G.E. Peristomal Skin Complications in Ileostomy and Colostomy Patients: What We Need to Know from a Public Health Perspective. *Int. J. Environ. Res. Public Health* **2023**, *20*,

Dermatiti peristomali:

- Eritema
- Papule
- Erosioni cutanee
- Ulcere
- Vescicole
- Incidenza dal **36.3%** al **73.4%**
- Prolunga la degenza ed il rischio di nuovo ricovero entro 120 gg dall'intervento

Complicanze: necrosi



- 1- 14 % delle colostomie
- Scheletrizzazione troppo spinta del meso
- Trazione eccessiva del meso
- Orifizio troppo stretto della fascia o cute
- Cambiamento di colore dal bluastro al nerastro fino al disfacimento

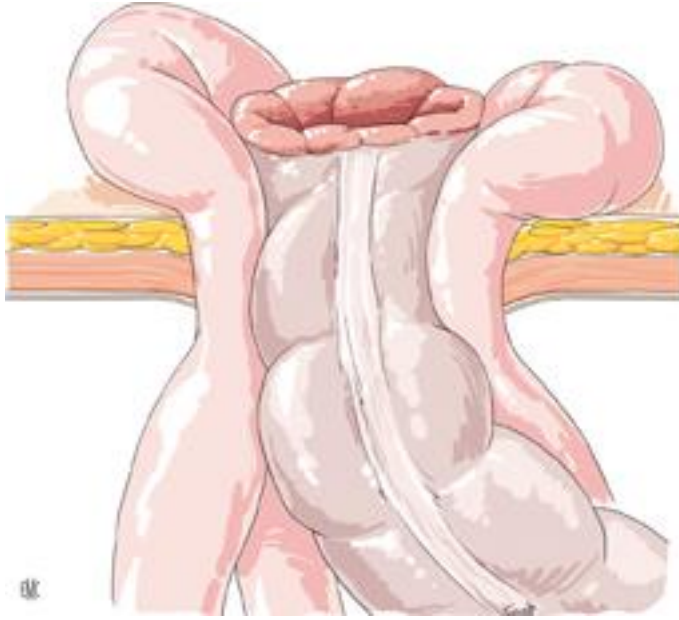
Complicanze: retrazione



2-3 % delle complicanze

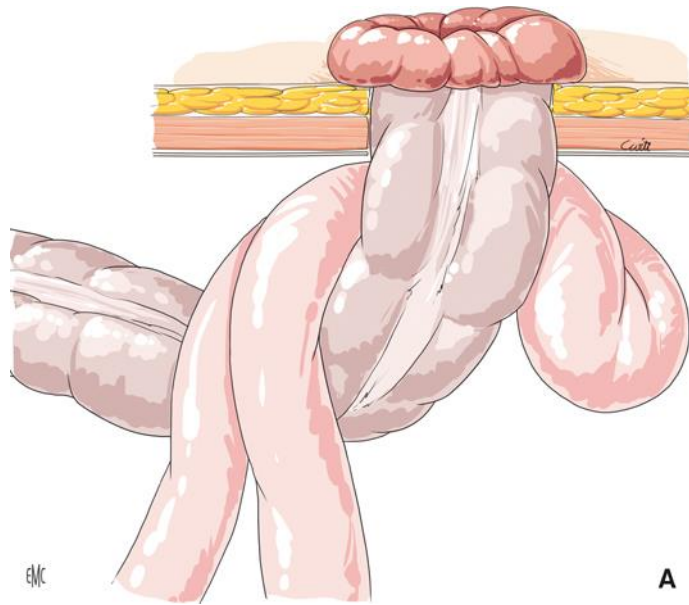
- Esteriorizzazione «forzata» del viscere
- Obesità
- Iperensione endoaddominale
- Ileo postoperatorio
- Complicanze settiche peristomali
- Retrazione cutanea precoce è un'eventualità grave (peritonite fecale)

Complicanze: ernia



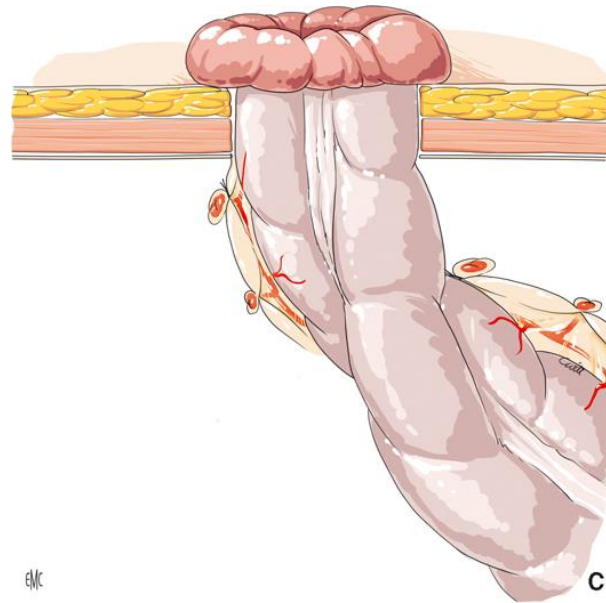
- 1-2 % delle complicanze
- Orifizio troppo grande
- Lassità della parete
- Iperpressione endoaddominale

Complicanze: Occlusione intestinale

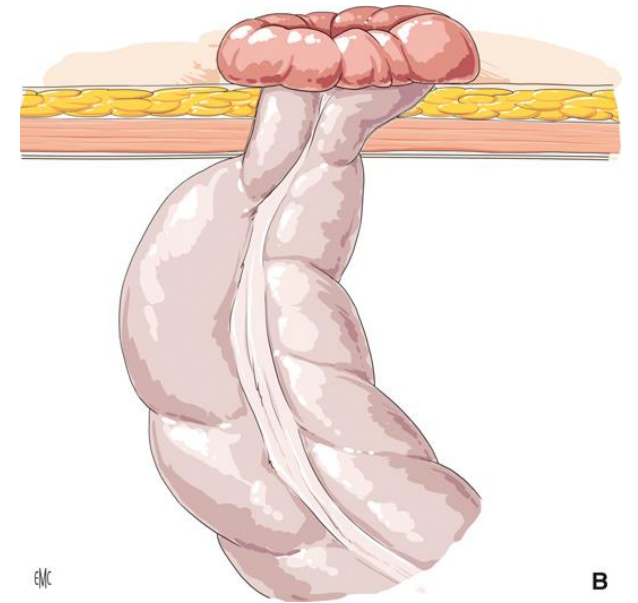


Incarcerazione di una ansa di tenue attraverso la breccia colo-parietale

0.5-7%



Torsione assiale dell'ansa esteriorizzata



Orifizio troppo stretto

Complicanze metaboliche.....

Review > Colorectal Dis. 2021 Jul;23(7):1721-1732. doi: 10.1111/codi.15654. Epub 2021 Apr 24.

Risk and consequences of dehydration following colorectal cancer resection with diverting ileostomy. A systematic review and meta-analysis

Joseph P Borucki^{1, 2}, Sarah Schlaeger³, Jasmine Crane¹, James M Hernon^{1, 2}, Adam T Stearns^{1, 2}

Affiliations + expand
PMID: 33783976 DOI: 10.1111/codi.15654



Results: Of 1927 screened papers, 22 studies were included (21 cohort studies and one randomized trial) with a total of 19 485 patients (12 209 with ileostomy). The prevalence of dehydration was 9.00% (95% CI 5.31-13.45, P < 0.001). The relative risk of dehydration following diverting ileostomy was 3.37 (95% CI 2.30-4.95, P < 0.001). Three studies assessing long-term trends in renal function demonstrated progressive renal impairment persisting beyond the initial insult. Consequences identified included unplanned readmission, delay or non-commencement of adjuvant chemotherapy, and development of chronic kidney disease.

Dehydration is the most common indication for readmission after diverting ileostomy creation

Evangelos Messaris¹, Rishabh Sehgal, Susan Deiling, Walter A Koltun, David Stewart, Kevin McKenna, Lisa S Poritz

Affiliations + expand
PMID: 22228161 DOI: 10.1097/DCR.0b013e31823d0ec5



Limitations: This study is limited by the retrospective analysis of data, and it does not capture patients that were treated at home or in clinic.

Conclusion: Readmission after colon or rectal resection with diverting loop ileostomy was high at 16.9%. Dehydration was the major cause for readmission. Patients receiving diuretics are at increased risk for readmission for dehydration. High-risk patients should be treated more cautiously as inpatients and closely monitored in the outpatient setting to help reduce dehydration and readmission.

Readmission for dehydration or renal failure after ileostomy creation

Ian M Paquette¹, Patrick Solan, Janice F Rafferty, Martha A Ferguson, Bradley R Davis

Affiliations + expand
PMID: 23838866 DOI: 10.1097/DCR.0b013e31828d02ba



Results: We observed a 17% 30-day readmission rate for dehydration or renal failure following ileostomy creation. Age greater than 50 was identified as an independent predictor of readmission with renal failure, whereas IPAA was predictive of readmission for simple dehydration, but not renal failure. Patients admitted with renal failure had significantly longer hospital stays and median hospital charges after readmission in comparison with patients admitted with simple dehydration.

Limitations: This study was limited by its retrospective nature and its limited sample size.

Conclusion: Hospital readmission due to dehydration or renal failure following ileostomy creation is common, with age >50 being the strongest predictor for renal failure. Appropriate strategies to decrease dehydration and renal failure following ileostomy creation need to be investigated.

Ma..... la QoL?????



The incidence and risk factors of low anterior resection syndrome (LARS) after sphincter-preserving surgery of rectal cancer: a systematic review and meta-analysis

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Affiliations + expand

PMID: 34296335 DOI: 10.1007/s00520-021-06326-2

Abstract

Background: Many patients after sphincter-preserving surgery experienced anorectal functional disturbances which were known as low anterior resection syndrome (LARS). Although many studies investigated LARS, there was inconsistency of their assessment tools and results. The aim of this systematic review was to elucidate the incidence and risk factors of LARS by a validated tool-LARS score.

Methods: A systematic literature search in Pubmed, Embase, and Cochrane Library was conducted in April 2020. Studies investigating patients who were evaluated by LARS score 1 year after their sphincter-preserving surgery due to rectal cancer were included. Meta-analysis of incidence was conducted using the double arcsine method. Meta-analysis of each risk factor was conducted using a random effects model.

Results: A total of 50 studies were included. The pooled incidence of major LARS was 44% (95% CI 40-48%; $I^2 = 88%$; 36 studies). Long course neoadjuvant radiotherapy (OR 2.89, 95% CI 2.06-4.05; $I^2 = 47%$; $P < 0.01$; 10 studies), total mesorectal excision (TME) (OR 2.13, 95% CI 1.49-3.04; $I^2 = 53%$; $P < 0.01$; 7 studies), anastomotic leak (OR 1.98, 95% CI 1.34-2.93; $I^2 = 39%$; $P < 0.01$; 9 studies), and diverting stoma (OR 1.89, 95% CI 1.58-2.27; $I^2 = 0%$; $P < 0.01$; 13 studies) were associated with increased risk of major LARS. No significant difference was found in major LARS incidence between transanal TME and laparoscopic TME (OR 1.36, 95% CI 0.78-2.40; $I^2 = 19%$; $P = 0.28$; 4 studies). Pouch reconstruction failed to lower the risk of major LARS in long term (OR 1.43, 95% CI 0.88-2.33; $I^2 = 70%$; $P = 0.29$; 9 studies).

Conclusion: The incidence of major LARS after sphincter-preserving surgery is relatively high. Neoadjuvant radiotherapy, TME, anastomotic leak, and diverting stoma are major risk factors. No significant differences in postoperative anorectal functions were observed between transanal and laparoscopic TME. Pouch reconstruction was not found to be significantly beneficial to anorectal functions in long term.



44% Incidenza

- Frequenza (2-6 scariche/die)
- Urgency (6-60%)
- Leakage/soiling (28-53%)
- Difficolta' a discriminare feci e gas (50-90%)
- Tenesmo
- Evacuazione frammentata



Impact of a defunctioning ileostomy and time to stoma closure on bowel function after low anterior resection for rectal cancer: a systematic review and meta-analysis

I. Vogel^{1,2}  · N. Reeves² · P. J. Tanis¹ · W. A. Bemelman¹ · J. Torkington² · R. Hompes¹ · J. A. Cornish²

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Abstract

Background Impaired bowel function after low anterior resection (LAR) for rectal cancer is a frequent problem with a major impact on quality of life. The aim of this study was to assess the impact of a defunctioning ileostomy, and time to ileostomy closure on bowel function after LAR for rectal cancer.

Methods We performed a systematic review based on the preferred reporting items for systematic reviews and meta-analyses (PRISMA) statement. Comprehensive literature searches were conducted using PubMed, Embase and Cochrane databases for articles published from 1989 up to August 2019. Analysis was performed using Review Manager (version 5.3) using a random-effects model.

Results The search yielded 11 studies (1400 patients) that reported on functional outcome after LAR with at least 1 year follow-up, except for one study. Five scales were used: the Low Anterior Resection Syndrome (LARS) score, the Wexner score, the Memorial Sloan Kettering Cancer Centre Bowel Function Instrument, the Fecal Incontinence Quality of Life scale, and the Hallbook questionnaire. Based on seven studies, major LARS occurred more often in the ileostomy group (OR 2.84, 95% CI, 1.70–4.75, $p < 0.0001$; $I^2 = 60\%$, $X^2 = 0.02$). Based on six studies, a longer time to stoma closure increased the risk of major LARS with a mean difference in time to closure of 2.39 months (95% CI, 1.28–3.51, $p < 0.0001$; $I^2 = 21\%$, $X^2 = 0.28$) in the major vs. no LARS group. Other scoring systems could not be pooled, but presence of an ileostomy predicted poorer bowel function except with the Hallbook questionnaire.

Conclusions The risk of developing major LARS seems higher with a defunctioning ileostomy. A prolonged time to ileostomy closure seems to reinforce the negative effect on bowel function; therefore, early reversal should be an important part of the patient pathway.

Score usati:

- LARS score
- Wexner score
- Fecal Incontinence Quality of life scale
- Memorial Sloan Kettering Cancer Centre Bowel Function Instrument
- Hallbook questionnaire

Conclusioni:

LAARS era piu' frequente in pz portatori di ileostomia ed i sintomi peggioravano in base al timing di chiusura dello stoma

ESA-RANDOMIZED CONTROLLED TRIAL

OPEN

The Role of Pelvic Floor Muscle Training on Low Anterior Resection Syndrome

A Multicenter Randomized Controlled Trial

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Marijke Van Kampen, PT, PhD,* Albert Wolthuis, MD, PhD,†
Yves Van Molhem, MD,‡ Bart Van Geluwe, MD,§ Nele Devoogdt, PT, PhD,*||
An De Groef, PT, PhD,*¶|# Ipek Guler Caamano Fajardo, MSc,**
and Inge Geraerts, PT, PhD*

Background and Objective: Total mesorectal excision (TME) for rectal cancer (RC) often results in significant bowel symptoms, commonly known as low anterior resection syndrome (LARS). Although pelvic floor muscle training (PFMT) is recommended in noncancer populations for treating bowel symptoms, this has been scarcely investigated in RC patients. The objective was to investigate PFMT effectiveness on LARS in patients after TME for RC.

Methods: A multicenter, single-blind prospective randomized controlled trial comparing PFMT (intervention; n = 50) versus no PFMT (control; n = 54) 1 month following TME/stoma closure was performed. The primary endpoint was the proportion of participants with an improvement in the LARS category at 4 months. Secondary outcomes were: continuous LARS scores, ColoRectal Functioning Outcome scores, Numeric Rating Scale scores, stool diary items, and Short Form 12 scores; all assessed at 1, 4, 6, and 12 months.

Results: The proportion of participants with an improvement in LARS category was statistically higher after PFMT compared with controls at 4 months (38.3% vs 19.6%; $P=0.0415$) and 6 months (47.8% vs 21.3%; $P=0.0091$), but no longer at 12 months (40.0% vs 34.9%; $P=0.3897$). Following secondary outcomes were significantly lower at 4 months: LARS scores (continuous, $P=0.0496$), ColoRectal Functioning

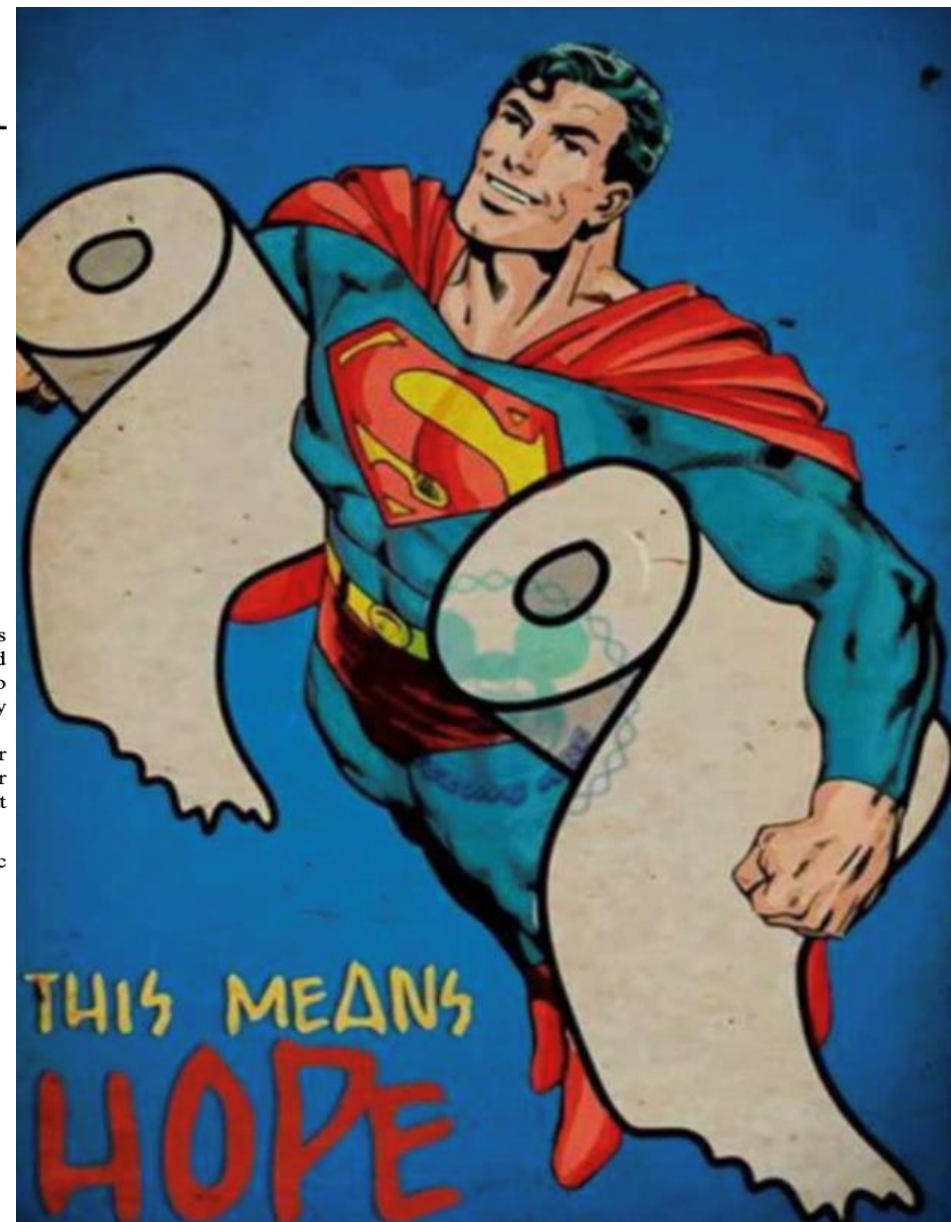
Outcome scores ($P=0.0369$) and frequency of bowel movements ($P=0.0277$), solid stool leakage (day, $P=0.0241$; night, $P=0.0496$) and the number of clusters ($P=0.0369$), derived from the stool diary. No significant differences were found for the Numeric Rating Scale/quality of life scores.

Conclusions: PFMT for bowel symptoms after TME resulted in lower proportions and faster recovery of bowel symptoms up to 6 months after surgery/stoma closure, justifying PFMT as an early, first-line treatment option for bowel symptoms after RC.

Keywords: bowel symptoms, low anterior resection syndrome, pelvic floor muscle training, randomized controlled trial, rectal cancer

(*Ann Surg* 2022;276:761–768)

Annals of Surgery • Volume 276, Number 5, November 2022



Cosa fare.....

- Ridurre l'inflammatione della rima anastomotica
- Modificare la consistenza delle feci
- Rieducare il pz al nuovo stimolo defecatorio (bfb manometrico)
- Ripristinare la flora batterica intestinale
- Eseguire uno studio funzionale (manometria rettale e/o ecografia endoanale) prima di ricanalizzare il pz
- FKT con es. di Kegel ed eventuale elettrostimolazione
- Supporto psicologico e presa in carico del pz

Riassumendo....

- Il confezionamento delle stomia puo' salvare la vita al pz
- E' fondamentale confezionare lo stoma con una buona tecnica chirurgica
- Se confezionata in elezione bisogna preparare il pz e scegliere la sede piu' idonea possibile
- Stabilire il timing giusto per la ricanalizzazione
- Effettuare idoneo supporto nutrizionale e di nursing
- Presa in carico da parte di uno staff dedicato
- FKT e studio pre-operatorio funzionale

QOL del pz!!

