Y. Van Nieuwenhove – gastrointestinale heelkunde UZGent

Casuïstiek appendicitis, diverticulitis endundarmobstructie

Interuniversitair postgraduaatsonderwijs heelkunde

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Appendicitis

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Appendicitis

- meest frequente pathologie bij spoedopnames voor buikpijn
- meest frequente urgente ingreep
- 13.000 per jaar (33 Mio€)

Nationale
Jaar : 2018
Munteenheid : EUR
Koppelingspercentage (uitgezonderd psychiatrische en langdurige verblijven) : 99,4 %

19/10/2020
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Print Export

APR-DRG=225 225 APPENDECTOMIE

Tabel 1: Gemiddelde bedragen per verblijf

Graad van ernst	Aantal verblijven	% van de verblijven	Gemid. leeftijd	Gemid. gefactureerde verblijfsduur	Gemid. bedrag aan verpleegdagprijs herberekend aan 100%	Gemid. totaal bedrag voor de farmaceutische producten	Gemid. bedrag voor de honoraria	Gemid. totaal bedrag
Mineur	8.353	65,8	29	1,9	944,11	87,42	1.078,89	2.110,41
Matig	4.130	32,5	36	3,7	1.894,41	161,18	1.278,91	3.334,51
Majeur	186	1,5	47	9,7	5.165,38	495,59	2.247,48	7.908,45
Extreem	28	0,2	54	20,3	10.492,46	1.450,62	5.098,04	17.041,13
TOTAAL	12.697	100,0	32	2,6	1.336,11	120,40	1.169,93	2.626,44

1-A 24-year-old man presents with right lower quadrant abdominal pain, anorexia, and nausea of one and a half days duration. There is right lower quadrant tenderness and rebound on examination, and his white blood cell (WBC) count is 14,900/mm³. Urinalysis shows 10 to 15 WBCs/hpf. Abdominal ultrasound demonstrates an appendix that is 7 mm in diameter with an appendicolith. What is the next treatment step for this patient?

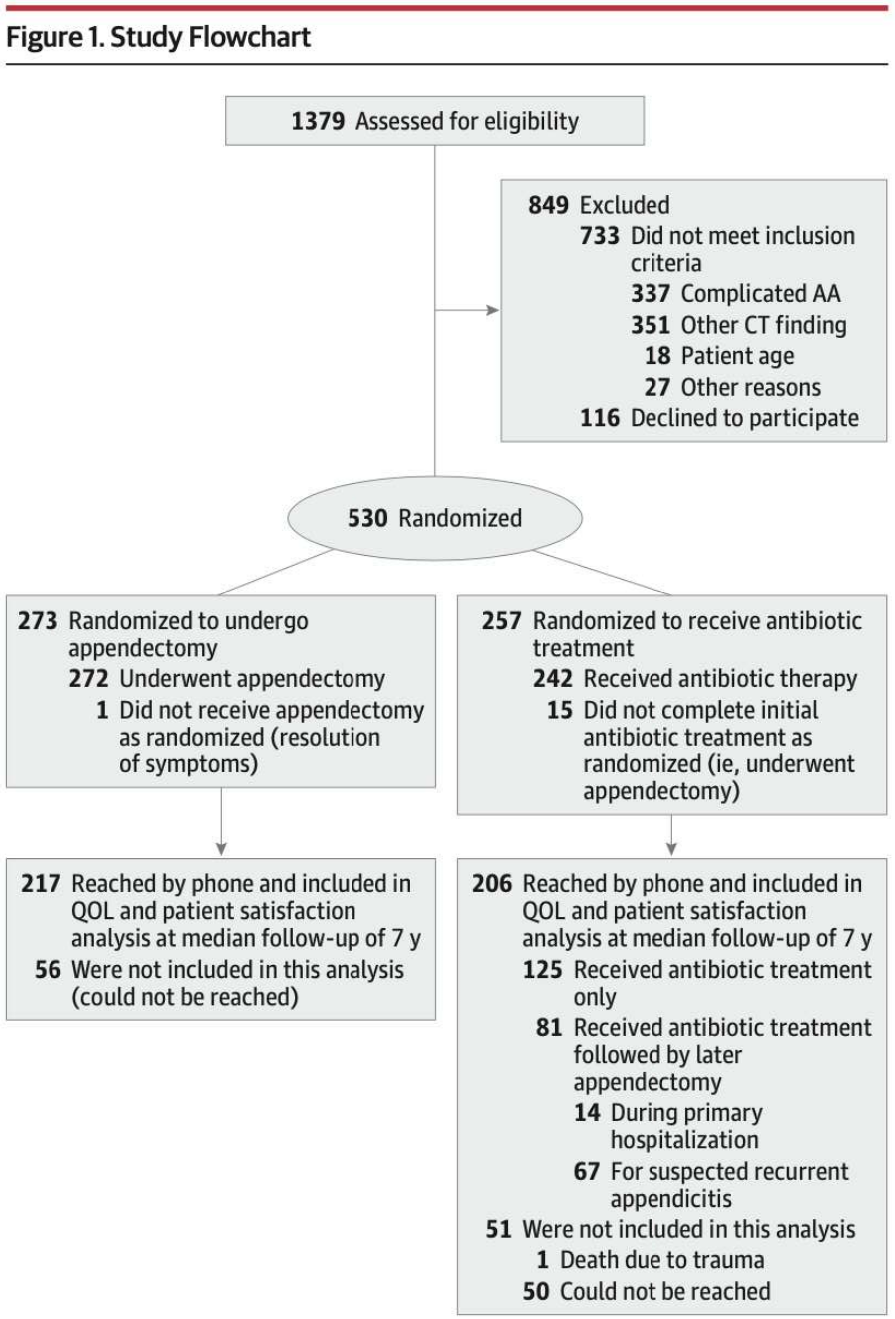
A. Nonoperative management
B. Laparoscopic appendectomy
C. Abdominal CT scan
D. Serum C-reactive protein level analysis
E. Urology consultation

1-A 24-year-old man presents with right lower quadrant abdominal pain, anorexia, and nausea of one and a half days duration. There is right lower quadrant tenderness and rebound on examination, and his white blood cell (WBC) count is 14,900/mm³. Urinalysis shows 10 to 15 WBCs/hpf. Abdominal ultrasound demonstrates an appendix that is 7 mm in diameter with an appendicolith. What is the next treatment step for this patient?

- The presence of an appendicolith is a relative contraindication for nonoperative management as the likelihood of complicated disease is about eight- to tenfold greater when an appendicolith is present. There is no need for additional testing given the findings on ultrasound. Minimal pyuria is not uncommon with acute appendicitis

Non-operative management

- APPAC RCT 2015-2018 (5y)



Salminen P, Tuominen R, Paajanen H, et al. Five-Year Follow-up of Antibiotic Therapy for Uncomplicated Acute Appendicitis in the APPAC Randomized Clinical Trial. *JAMA.* 2018;320(12):1259–1265

Appendicolith – Int J Colrect dis 2019

Table 3 The results of logistic regression analysis for the presence of acute appendicitis with appendicolith. The results are presented as odds ratio (OR) with 95% confidence interval (95% CI)

Variable	Univariate OR	Adjusted[a] OR	95% CI	*p* value
Micro-abscess	2.02	2.16	1.22 to 3.83	0.008
Eosinophils, n/mm^2	0.97	0.97	0.95 to 0.99	0.013
Neutrophils, $\geq 150/mm^2$	3.06	3.04	1.82 to 5.09	< 0.001
Fecal material	5.37	6.05	3.45 to 10.59	< 0.001
Depth of inflammation, ≤ 2.8 mm	2.17	2.18	1.29 to 3.71	0.004

[a] Adjusting variables age, sex, and duration of symptoms

acute appendicitis with appendicolith. Our study gives a further support to the classification of appendicolith appendicitis as complicated acute appendicitis. Future studies including

Non-operative management

- APPAC RCT 2015-2018 (5y)
- 530 pt appendectomy vs AB
- 27% failure 1y, 39% at 5y

Conclusions and Relevance Among patients with CT-proven, uncomplicated appendicitis, antibiotic treatment did not meet the prespecified criterion for noninferiority compared with appendectomy. Most patients randomized to antibiotic treatment for uncomplicated appendicitis did not require appendectomy during the 1-year follow-up period, and those who required appendectomy did not experience significant complications.

Conclusions and Relevance Among patients who were initially treated with antibiotics for uncomplicated acute appendicitis, the likelihood of late recurrence within 5 years was 39.1%. This long-term follow-up supports the feasibility of antibiotic treatment alone as an alternative to surgery for uncomplicated acute appendicitis.

Cost PLoS One 2019

Table 1

Mean hospital charges, productivity losses and overall costs in Euros per patient for appendectomy and antibiotic therapy group patients with uncomplicated acute appendicitis at five-year follow-up.

	Appendectomy Group € (95% CI, €)	Antibiotic therapy Group € (95% CI, €)	Difference € (95% CI, €)	p<
One-year follow-up				
Hospital charges	2718 (2636–2799)	1707 (1547–1865)	1010 (835–1186)	0.001
Productivity losses	2962 (2806–3118)	1845 (1712–1976)	1117 (911–1322)	0.001
Overall costs	5680 (5489–5872)	3552 (3334–3769)	2127 (1840–2417)	0.001
Five-year follow-up				
Hospital charges	2730 (2645–2817)	2056 (1861–2251)	674 (465–883)	0.001
Productivity losses	2986 (2822–3149)	2115 (1950–2280)	871 (639–1104)	0.001
Overall costs	5716 (5510–5925)	4171 (3879–4463)	1545 (1193–1899)	0.001

QoL – JAMA Surg 2020

Conclusions and relevance: In this analysis, long-term QOL was similar after appendectomy and antibiotic therapy for the treatment of uncomplicated acute appendicitis. Patients taking antibiotics who later underwent appendectomy were less satisfied than patients with successful antibiotics or appendectomy.

en ptn. met negatieve appendectomie?

2-You are performing a laparoscopic appendectomy on a 22-year-old man with acute gangrenous appendicitis. On exposing the tip of the appendix, you encounter 30 mL of purulent fluid. In addition to performing an appendectomy, how should you proceed?

A. Convert to an open operation.
B. Explore the abdomen for an additional site of infection.
C. Aspirate the fluid, irrigate the area thoroughly, and place a drain.
D. Complete the operation.

2-You are performing a laparoscopic appendectomy on a 22-year-old man with acute gangrenous appendicitis. On exposing the tip of the appendix, you encounter 30 mL of purulent fluid. In addition to performing an appendectomy, how should you proceed?

- This patient has complicated appendicitis. There are no findings that suggest that conversion to an open operation is indicated. The fact that the pus was proximate to the appendix suggests it is the source of infection. The purulent fluid should be aspirated, the area irrigated, and a drain placed.

Nut van een drain?

Cochrane Library

Cochrane Database of Systematic Reviews

Abdominal drainage to prevent intra-peritoneal abscess after open appendectomy for complicated appendicitis (Review)

Li Z, Zhao L, Cheng Y, Cheng N, Deng Y

Samenvatting

Patient or population: people undergoing emergency open appendectomy for complicated appendicitis
Setting: hospital
Intervention: drainage
Comparison: no drainage

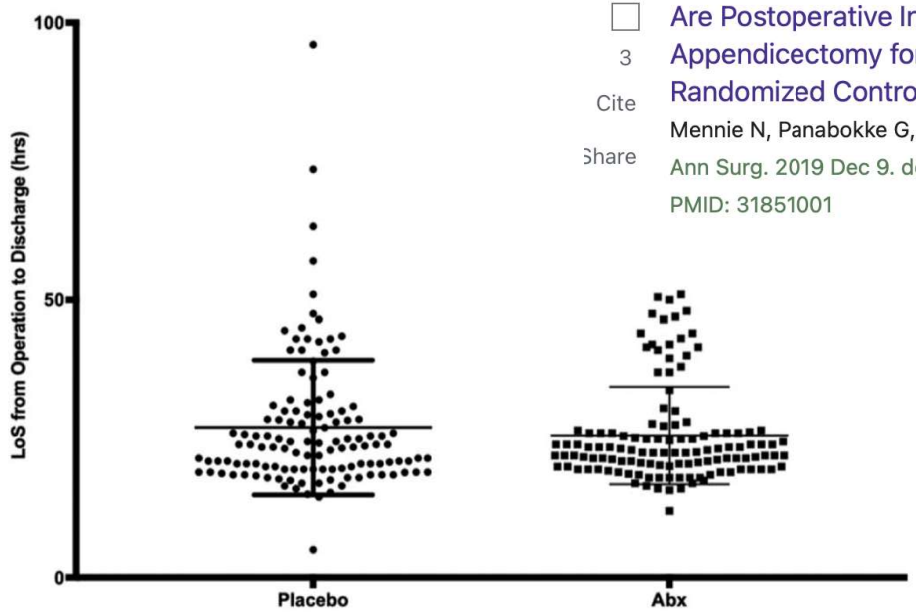
Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	No of participants (studies)	Quality of the evidence (GRADE)	Comments
	Risk with no drain use	Risk with drain use				
Intra-peritoneal abscess Follow-up: 14 days	107 per 1000	131 per 1000 (50 to 342)	**RR 1.23** (0.47 to 3.21)	453 (5 studies)	⊕⊝⊝⊝ **Very low**[a,b,c]	
Wound infection Follow-up: 30 days	254 per 1000	511 per 1000 (224 to 1000)	**RR 2.01** (0.88 to 4.56)	478 (5 studies)	⊕⊝⊝⊝ **Very low**[a,b,c]	
Morbidity Follow-up: 30 days	67 per 1000	445 per 1000 (142 to 1000)	**RR 6.67** (2.13 to 20.87)	90 (1 study)	⊕⊝⊝⊝ **Very low**[a,c]	
Mortality Follow-up: 30 days month	6 per 1000	27 per 1000 (7 to 101)	**Peto OR 4.88** (1.18 to 20.09)	363 (4 studies)	⊕⊕⊕⊝ **Moderate**[c]	
Hospital stay (days)	The mean hospital stay in the control groups was 4.60 days	The mean hospital stay in the intervention groups was **2.17 days higher** (1.76 days to 2.58 days higher)	**MD 2.17 days** higher (1.76 higher to 2.58 higher)	298 (3 studies)	⊕⊝⊝⊝ **Very low**[a,d]	

AB na appendectomie?

TABLE 2. Summary of the Primary and Secondary Outcomes

	Placebo	Abx	*P*-value
Wound infections (%)	8 (6.6%)	1 (0.8%)	$P = 0.01$
WI postoperative day: median (range)	5 (3–7)	3 (N/A)	–
IAA	0	0	–
Postoperative anti-emetic use	47/122 (38.5%)	38/121 (31.4%)	$P = 0.3$
Doses of postoperative anti-emetics: median (range)	1 (1–5)	1 (1–6)	$P = 0.14$
Postoperative opioid use	58/122 (47.5%)	59/121 (48.7%)	$P = 0.9$
Doses of postoperative opioid: median (range)	2 (1–8)	1 (1–5)	$P = 0.31$

IAA indicates intra-abdominal abscess; WI, wound infection.



3
Cite
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Are Postoperative Intravenous Antibiotics Indicated After Laparoscopic Appendicectomy for Simple Appendicitis? A Prospective Double-blinded Randomized Controlled Trial.

Mennie N, Panabokke G, Chang A, Tanny ST, Cheng W, Pacilli M, Ferguson P, **Nataraja RM.**

Ann Surg. 2019 Dec 9. doi: 10.1097/SLA.0000000000003732. Online ahead of print.

PMID: 31851001

FIGURE 2. Length of stay of the placebo and antibiotic group.

Casus Man 21jaar

- Verwezen door de huisarts met vermoeden van darmobstructie. IM injectie Diclofenac gekregen.

- Patiënt spreekt alleen Arabisch (afkomstig van Syrië). Taalbarriere. Vader die mee is gekomen spreekt ook alleen Arabisch.

- Telefonisch met kennis van de patiënt gesproken die tolkt:
- Abdominale pijn thv de rechter fossa sinds vandaag. Geen koorts, geen mictialgie, geen vervoerspijn. Geen nausea of braken. Al 2 dagen geen stoelgang gehad. Beterschap van de klachten na pijnstilling die werd gegeven door de huisarts. Geen bloed opgemerkt in de stoelgang of urine.

Casus Man 21jaar

- Bevindingen
- T: 36,8°C
- McBurney +
- Labo
  - ECG: SR 115/min, geen significante ST-segment deviatie
  - Labo: WBC 7.7 CRP 248,5, creat 1,39, Hb 17,9
  - Urinestaal: RBC 130, geen pyurie

Alvarado

Alvarado score for appendicitis

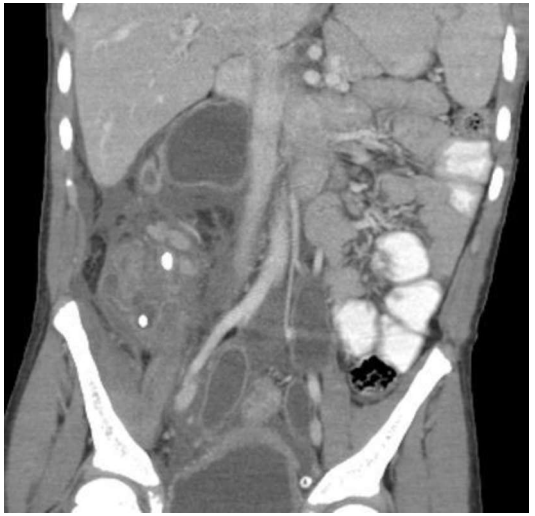
Symptoms	Score
Migratory right iliac fossa pain	1
Nausea / Vomiting	1
Anorexia	1
Signs	
Tenderness in right iliac fossa	2
Rebound tenderness in right iliac fossa	1
Elevated temperature	1
Laboratory findings	
Leucocytosis	2
Shift to the left of neutrophils	1
Total	**10**

5-6 → Possible

7-8 → Probable

> 9 → Very probable

Beeldvorming



- Echografie
  - Sensitiviteit 75% en specificiteit 90-100%
  - Maar…“operator dependent”!
  - vooral in kinderen en (zwangere) vrouwen (MRI overwegen)
- CT
  - Sensitiviteit en specificiteit ±80%
  - Vooral nuttig bij “appendiculaire massa”

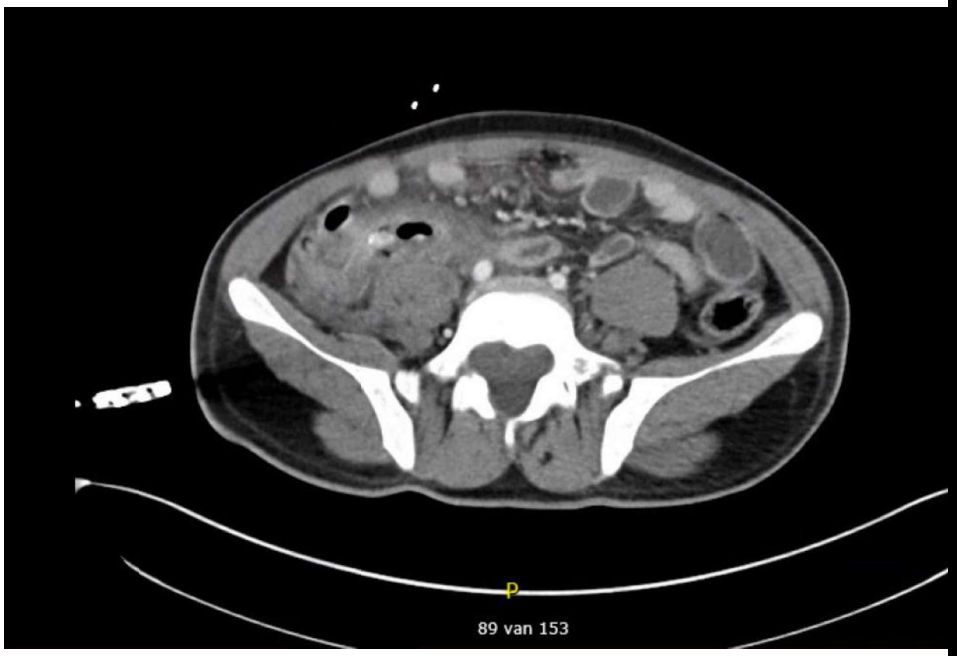
Beperkt nut in diagnose van ongecompliceerde appendicitis

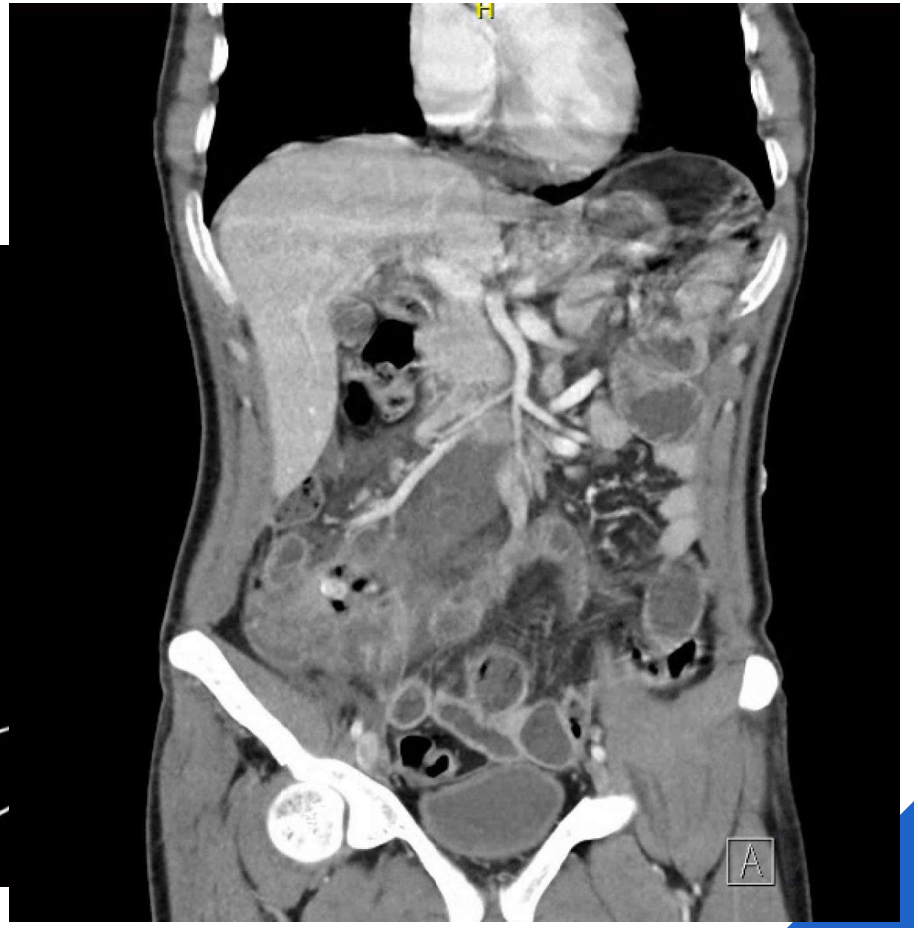
Vaststelling van appendicoliet verhoogt kans dat het over appendicitis gaat.

Casus Man 21jaar

- Echo
  - Cholecystolithiasis. Milde dilatatie van de intrahepatische galwegen met enige reserve voor aerobilie. Pathologisch verdikte wand van zowel het caecum en het terminale ileum met vrij vocht in het kleine bekken. De vermoedelijk gevisualiseerde appendix komt normaal voor, maar dit kan niet met zekerheid uitgesloten worden. Aan te vullen met CT abdomen.
- Beleid?

Casus Man 21jaar



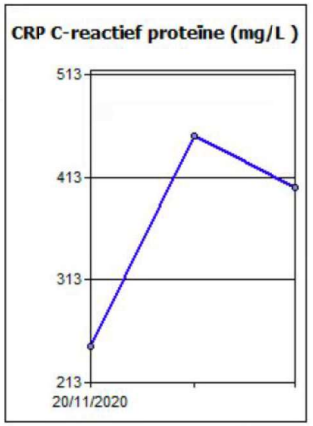


Casus Man 21jaar

- Beleid?

Datum	Tijd	Waarde	Refwaarde	Eenheid/opm	Order Nr
23/11/2020	12:04	402,9	<5.0	mg/L	201123-2504
22/11/2020	08:41	453,2	<5.0	mg/L	201122-0003
20/11/2020	15:35	248,5	<5.0	mg/L	201120-0190

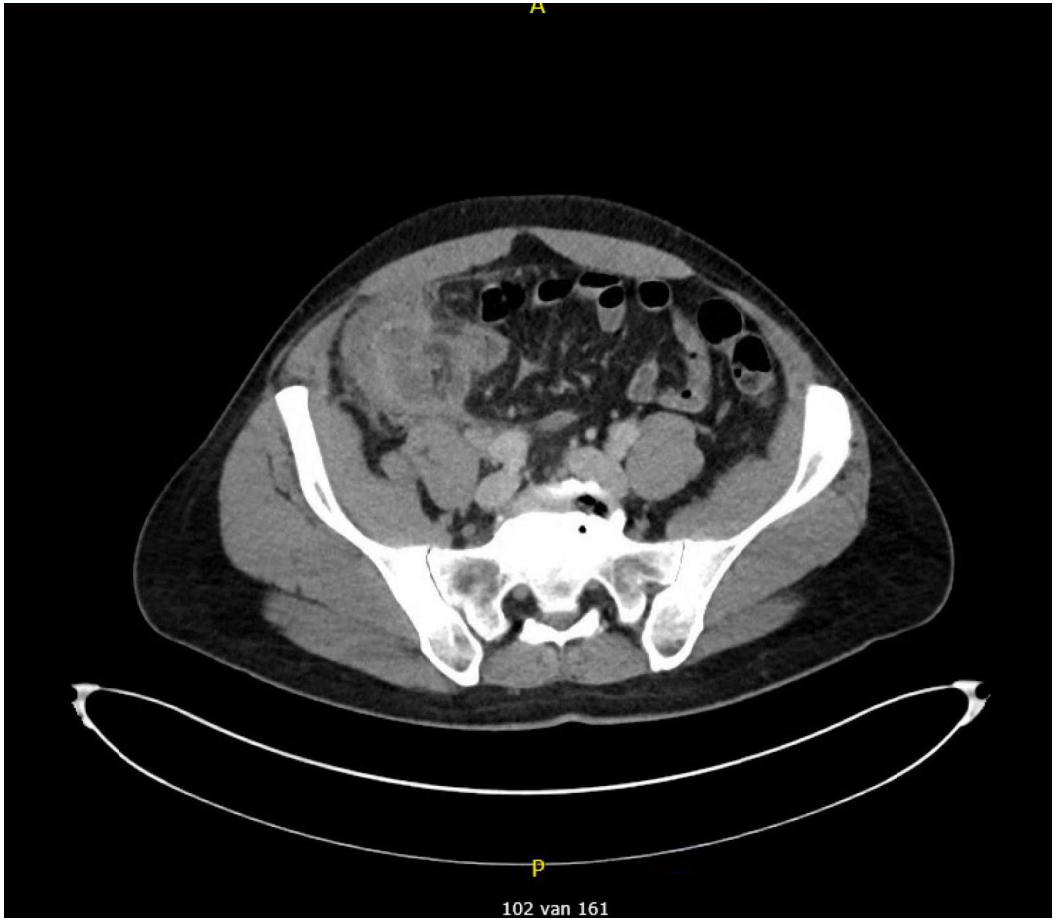
Kopieren naar excel: Selecteer de tabel volledig van lijn tot lijn, dan ctrl-C + V



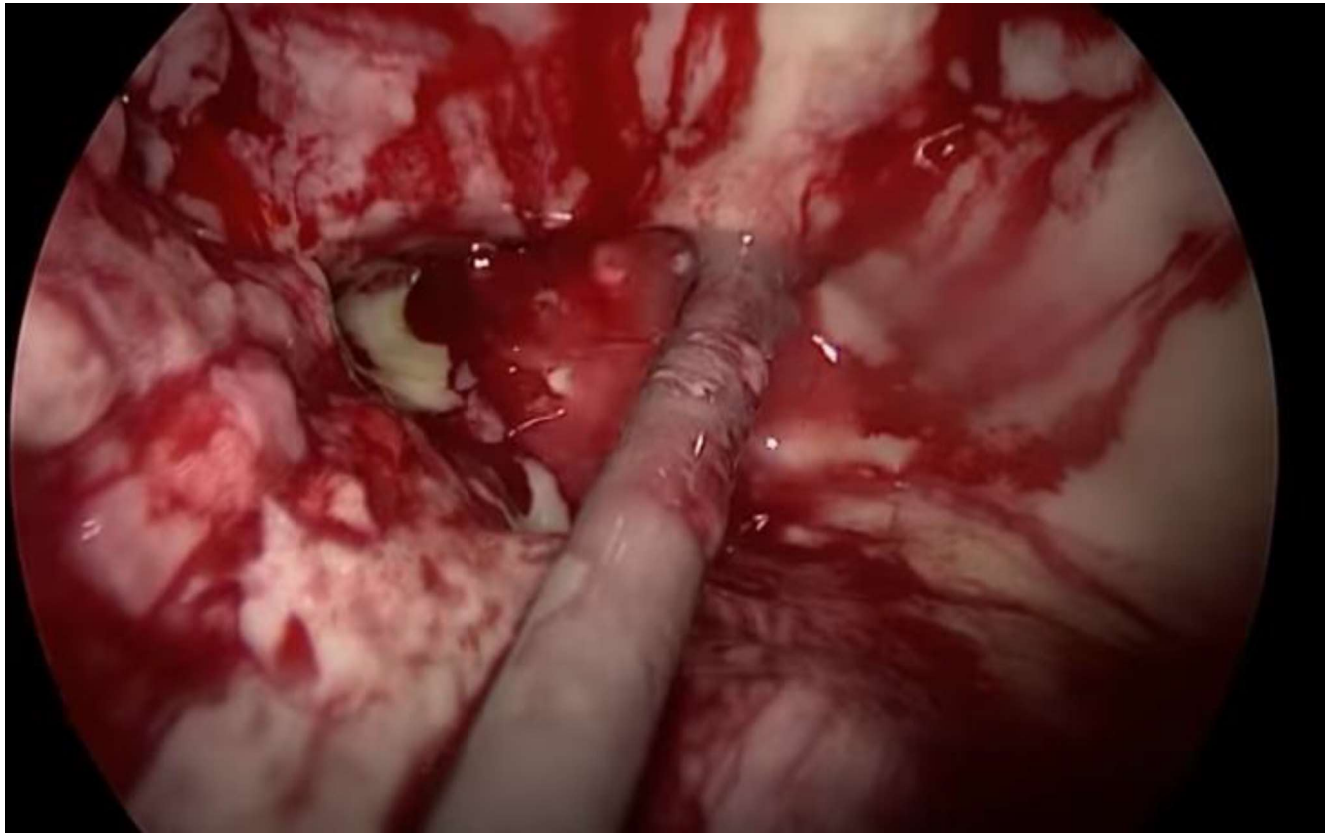
Kopieer grafiek (gebruik IE): Tabel (enkel in IE):

Laboratorium gids: CRP

Man 47 jaar

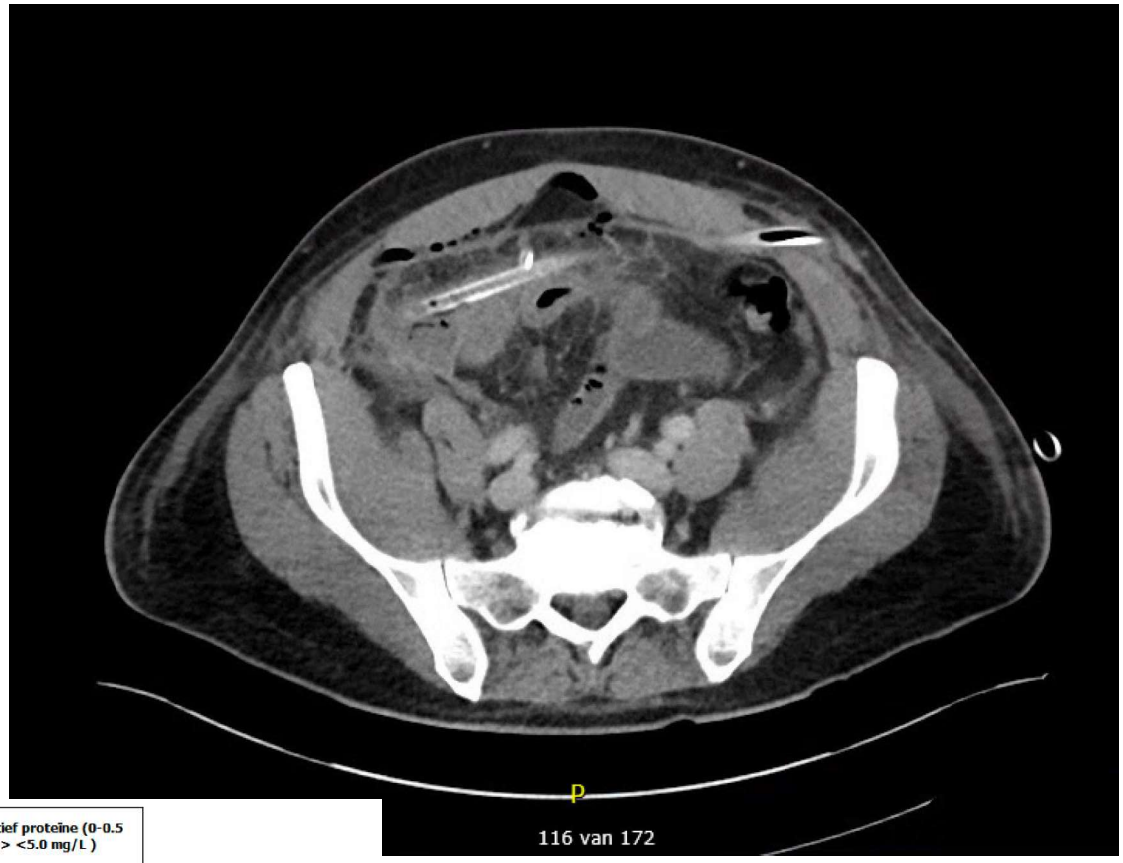


Looking for clues...



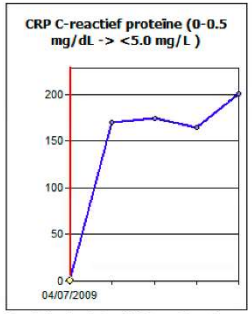
POD 2

- Stoelgang via drain



Datum	Tijd	Waarde	Refwaarde	Eenheid/opm	Order Nr
23/11/2020	11:23	**200,2**	<5.0	mg/L	201123-1688
23/11/2020	08:00	**volgt**			201123-1772
22/11/2020	11:02	**164,2**	<5.0	mg/L	201122-1522
21/11/2020	12:18	**173,9**	<5.0	mg/L	201121-1288
19/11/2020	21:48	**169,8**	<5.0	mg/L	201119-0220
04/07/2009	15:25	**1,2**	0-0.5 **Refw!**	mg/dL **Eenheid!**	090704-0244

Kopieren naar excel: Selecteer de tabel volledig van lijn tot lijn, dan ctrl-C + V



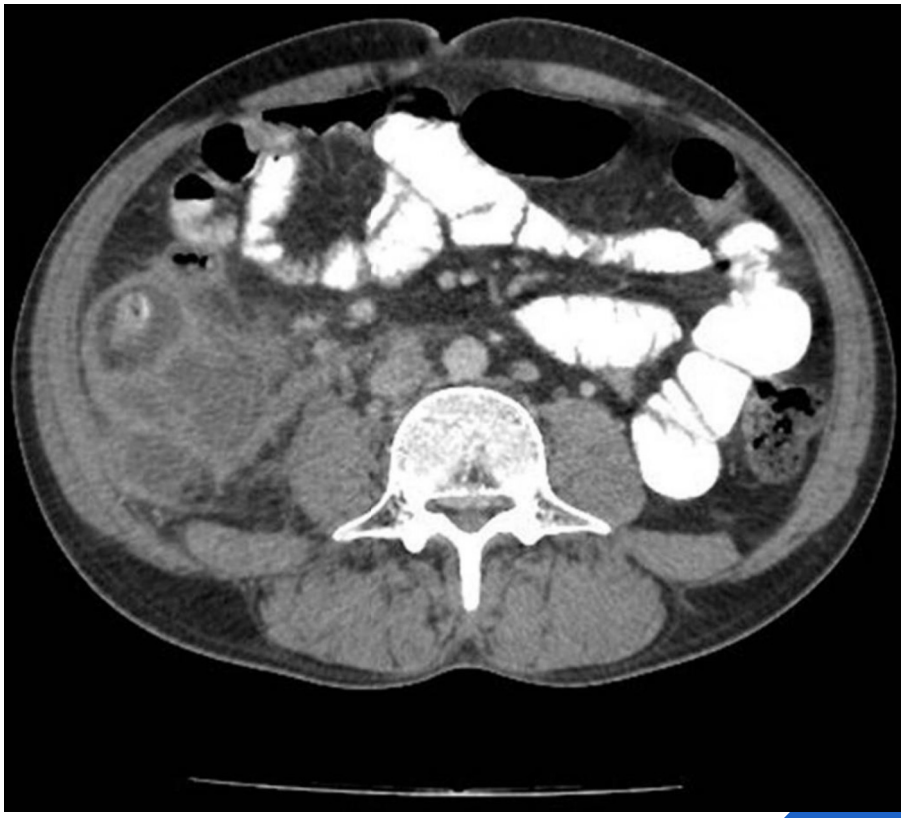
Opgelet! ---**Laatste wijziging referentiewaarde en/of unit vanaf 04/07/2009**

Kopieer grafiek (gebruik IE): Tabel (enkel in IE):

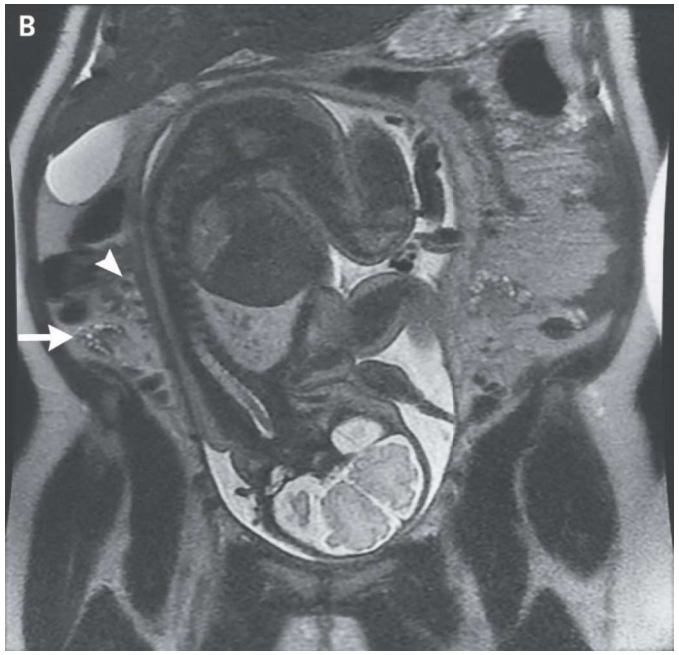
Laboratorium gids: CRP

Gecompliceerde appendicitis

- Gangreen - perforatie
  - Peritonitis
  - Abces
- Appendiculaire massa
  - Afkoelen veiliger (Friedell ML, et al., Am Surg 2000)
  - Interval appendectomy na 6 weken- 3maand
- Frequenter bij
  - mannen
  - oudere ptn
  - >3 comorbiditeiten
- Cave onderliggende maligniteit bij oudere pt. (1-1,5%)



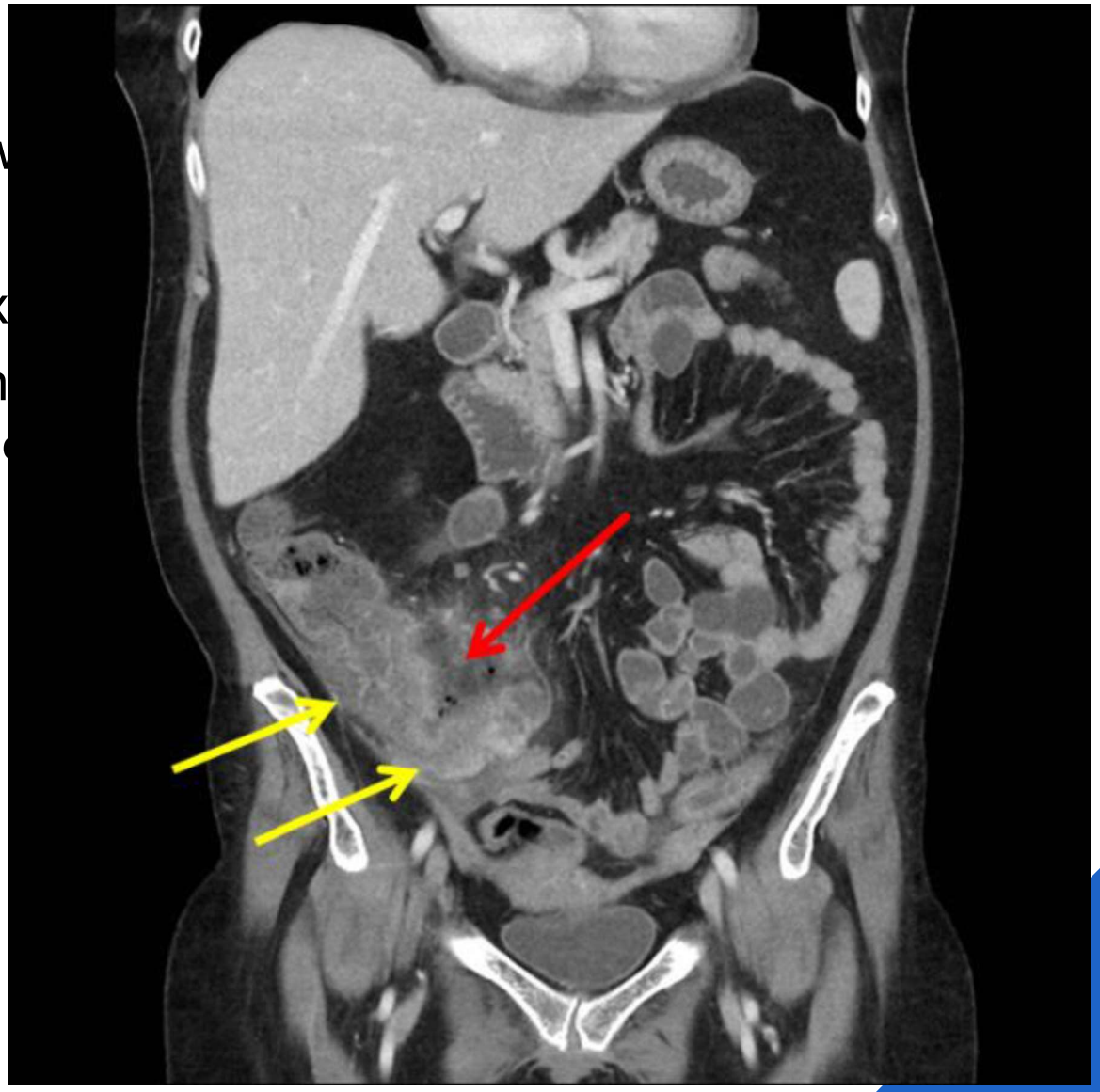
Zwangerschap



- moeilijkere diagnose
  - frequent buikpijn tgv constipatie, UWI, ...
  - fysiologische leucocytose
  - verplaatsing van de appendix naar craniaal
- gevaarlijker
  - bij missen diagnose en gecompliceerde appendicitis
    - 6% (vs 2%) miskraam
    - 11% (vs 4%) vroeggeboorte
  - negatieve appendectomie
    - 4% miskraam
    - 10% vroeggeboorte
- Laparoscopische approach mogelijk in eerste 2 trimesters

Immuungecompromiteerde patiënt

- leucocytose vaak afw
- CT abdomen nuttig
- drempel laag voor ex
- DD typhlitis bij patiën
  - vaak conservatief bel



Diverticulitis

UZ GENT

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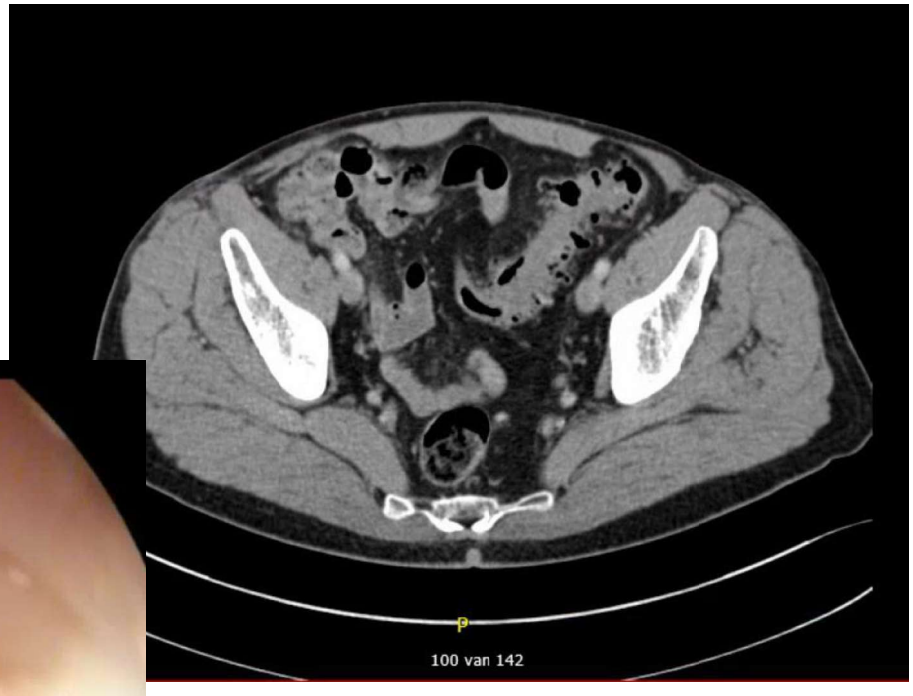
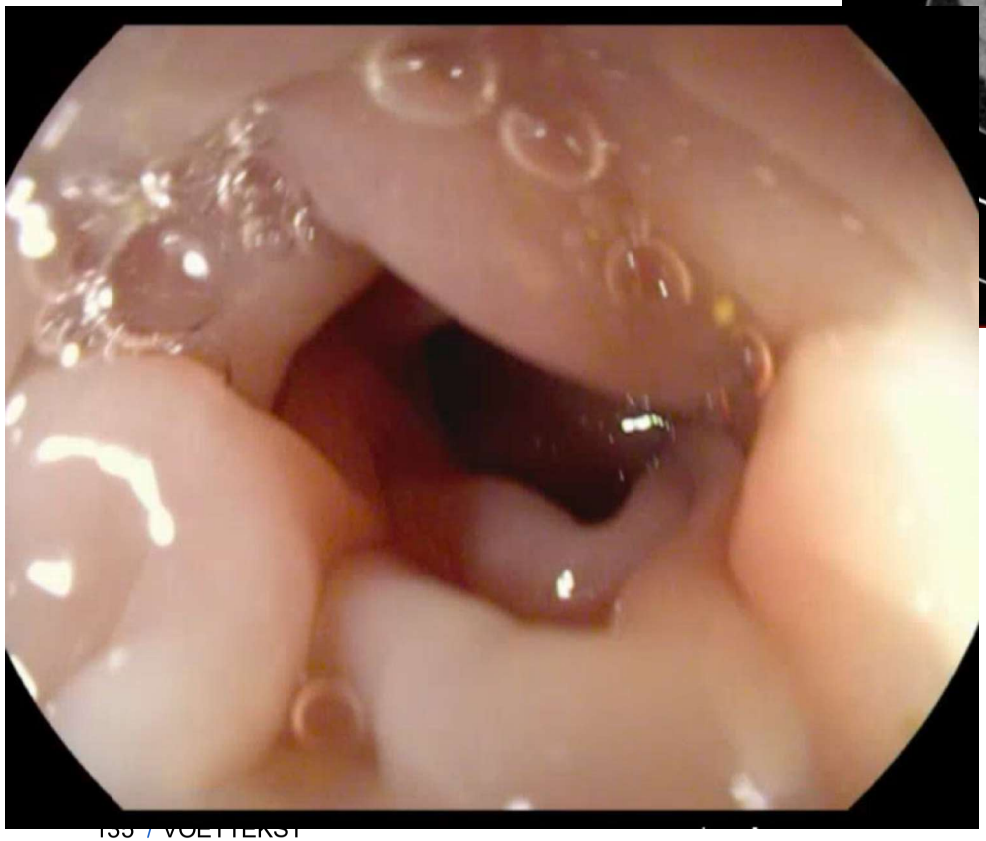
Man 61j

- Appendectomie
- Pancreatitis bij alcohol-abusus
- 1998: gastritis, bulbitis, spastisch colon, recidiverende buikklachten
- 2002: microscopische colitis
- 2008: gastro-enteritis, IBS?
- 2009: diverticulitis, bij coloscopie diverticulose van het sigmoid
- 2013: STEMI waarvoor pci cx met DES
- 2015: diverticulitis
- 2017: braken eci, geen argumenten bovenste tractus digestivus bloeding, rhabdomyolyse eci
- 2018: pijn bovenbuik: refluxoesofagitis graad B bij hernia diafragmatica van het sliding type, cardia insufficiëntie. Niet erosieve bulbitis, flink actief tele-angiectasiën hoog in maag, recidief diverticulitis (na sigmo)
- 01/2019: graad C GORZ bij braken (en buikpijn) eci
- 11/2019: oedemateus en geïnflammeerd sigmoid waardoor onvolledige coloscopie. Start antibiotica kuur

Man 61j





Recommandations: Haute Autorité de Santé (2017)

Tableau 1. Grade des recommandations

A	**Preuve scientifique établie** Fondée sur des études de fort niveau de preuve (niveau de preuve 1) : essais comparatifs randomisés de forte puissance et sans biais majeur ou méta-analyse d'essais comparatifs randomisés, analyse de décision basée sur des études bien menées.
B	**Présomption scientifique** Fondée sur une présomption scientifique fournie par des études de niveau intermédiaire de preuve (niveau de preuve 2), comme des essais comparatifs randomisés de faible puissance, des études comparatives non randomisées bien menées, des études de cohorte.
C	**Faible niveau de preuve** Fondée sur des études de moindre niveau de preuve, comme des études cas-témoins (niveau de preuve 3), des études rétrospectives, des séries de cas, des études comparatives comportant des biais importants (niveau de preuve 4).
AE	**Accord d'experts** En l'absence d'études, les recommandations sont fondées sur un accord entre experts du groupe de travail, après consultation du groupe de lecture. L'absence de gradation ne signifie pas que les recommandations ne sont pas pertinentes et utiles. Elle doit, en revanche, inciter à engager des études complémentaires.

Richtlijnen

Proposition de recommandations :

B	La sigmoïdectomie élective systématique après poussée de diverticulite aiguë n'est pas recommandée si le patient est asymptomatique, s'il n'est pas immunodéprimé ou insuffisant rénal chronique et si les poussées n'impactent pas sa qualité de vie.

C	Il est recommandé de discuter une sigmoïdectomie élective dans les situations suivantes : • au décours d'une diverticulite aiguë compliquée, particulièrement en cas d'abcès ; • chez le patient immuno-déprimé ou insuffisant rénal chronique, en intégrant les facteurs de risque opératoire suivants : âge supérieur à 75 ans et comorbidités, en particulier cardiopathie et BPCO.

Richtlijnen

A	Chez le patient asymptomatique, l'âge inférieur à 50 ans ne constitue pas une indication opératoire en soi.

B	Il est recommandé de proposer une sigmoïdectomie élective en cas de symptômes persistants après une poussée (incluant la « smoldering diverticulitis » ou diverticulite subintrante) ou de récidives fréquentes impactant la qualité de vie. Le nombre de poussées n'est pas une indication en soi.

C	La sigmoïdectomie élective est recommandée en cas de fistule, selon le terrain et le type de symptômes.
	La sigmoïdectomie élective est recommandée en cas de sténose symptomatique.

1-A 40-year-old woman with a history of renal transplant and who is currently on tacrolimus and prednisone presents to the emergency department with abdominal pain. CT imaging reveals uncomplicated diverticulitis. She is treated with intravenous antibiotics, and her symptoms improve. What is the next step in this patient's treatment?

A. Discharge the patient, and hold off on any further surgical interventions because of her immunosuppressed state.
B. Perform an endoscopy during this hospitalization to rule out malignancy.
C. Discharge the patient, and perform a sigmoid resection in 6 to 12 weeks.
D. Perform sigmoid colectomy during this hospitalization.
E. Continue the antibiotics regimen for 14 days because of the patient's immunosuppressed state.

1-A 40-year-old woman with a history of renal transplant and who is currently on tacrolimus and prednisone presents to the emergency department with abdominal pain. CT imaging reveals uncomplicated diverticulitis. She is treated with intravenous antibiotics, and her symptoms improve. What is the next step in this patient's treatment?

- Immunosuppressed patients with diverticulitis typically require sigmoid resection after the first bout of uncomplicated diverticulitis.

2-A 72-year-old woman who underwent a hysterectomy 30 years ago presents with fecaluria. A CT scan reveals thickening of the sigmoid colon and air in the bladder. She is hemodynamically stable. What is the next step in treatment?

A. Emergency sigmoid colectomy
B. Emergency cystectomy
C. Administration of antibiotics
D. Ileostomy

2-A 72-year-old woman who underwent a hysterectomy 30 years ago presents with fecaluria. A CT scan reveals thickening of the sigmoid colon and air in the bladder. She is hemodynamically stable. What is the next step in treatment?

- The patient is stable, so she does not need an emergency operation. The first treatment step is usually antibiotics followed by planning an elective sigmoid resection given the risk of urinary sepsis. Ideally, the operation is performed when inflammation has subsided.

3- A 50-year-old woman presents to the emergency department reporting abdominal pain and 1 week of nausea, emesis, and food intolerance. She is hemodynamically stable and has focal tenderness in the left lower quadrant. CT of the abdomen reveals diverticulitis with a colonic stricture 8-cm in length. How should management of this patient proceed?

A. Colectomy with primary anastomosis
B. Colonoscopy
C. Colectomy with diverting loop ileostomy
D. Two-stage colectomy
E. Exploratory laparoscopy

3- A 50-year-old woman presents to the emergency department reporting abdominal pain and 1 week of nausea, emesis, and food intolerance. She is hemodynamically stable and has focal tenderness in the left lower quadrant. CT of the abdomen reveals diverticulitis with a colonic stricture 8-cm in length. How should management of this patient proceed?

- Before any surgery, a colonoscopy is warranted to evaluate the etiology of the stricture to determine if it is benign or malignant because this finding will impact surgical planning.

5- A 46-year-old man with chronic alcoholism presents to the emergency department with severe abdominal pain. Abdominal CT imaging reveals Hinchey stage III perforated diverticulitis. He is hemodynamically stable. A decision is made to proceed to the operating room. Which procedure is indicated for this patient?

A. Laparoscopic lavage without bowel resection
B. One-stage colectomy with primary anastomosis
C. Two-stage colectomy with Hartmann procedure
D. Proctocolectomy
E. Colectomy with distal terminal ileum resection

5- A 46-year-old man with chronic alcoholism presents to the emergency department with severe abdominal pain. Abdominal CT imaging reveals Hinchey stage III perforated diverticulitis. He is hemodynamically stable. A decision is made to proceed to the operating room. Which procedure is indicated for this patient?

- Given the patient's likely malnourished state, a two-stage colectomy would be most appropriate. This procedure involves sigmoidectomy, closure of the rectal stump, and proximal end colostomy in the first stage. The colostomy reversal is the second stage, which usually takes place 3 to 6 months after the first surgery. Laparoscopic lavage has largely fallen out of favor as a typical intervention for perforated diverticulitis. The two rare indications are for (1) patients with equivocal imaging for perforation and benign abdominal examination who are found to have a contained abscess on exploratory laparoscopy and (2) patients who have severe intra-abdominal inflammation that precludes a safe Hartmann procedure. Although this intervention would be appropriate for an otherwise well-nourished, hemodynamically stable patient, the patient in this case has chronic alcoholism and thus likely suffers from malnutrition, which predisposes him to poor tissue healing. There is no indication that this patient needs a proctocolectomy or resection of the small bowel.

Casus vrouw 82 jaar

AHT, hypercholesterolemie

hypothyroïdie

1990: heupprothese rechts

2014: totale heupprothese links

BorstCa

- 1981borstcarcinoma rechts met botmetastasen.

chemotherapie gevolgd door een hormonale behandeling (nolvadex en orimeten + hydrocortisone) en een bestraling van de wervelmetastase en de beide ovaria.

- 27/12/2004 tumorectomie met sentineklierresectie rechter borst: weinig gedifferentiëerd ductaal adenocarcinoma pT1cN0(sn)M0. ER/PRsterk positief.

Postoperatief radiotherapie (AZ Brugge 30x; inclusief mamaria interna). Start arimidex .

- 01/2011: stop Arimidex.

27/6/2003 TVT

9/9/2015 losmaken sling

17/2/2016 TVT-O

BlaasCa cN0M0

24/05/2019 TURblaas: hooggradig UCC pT2 G3 thv achterwand

29/07/2019 - 27/08/2019 radiotherapeutische behandeling tot een dosis van 52,5 Gy in 20 fracties thv de blaas, gecombineerd met wekelijks Gemcitabine (100 mg/m²) op dag 1, 8, 15 en 22.

24/4/20 TURblaas: CIS thv achterwand

Casus vrouw 82 jaar

Verwijzing door de huisarts omwille van progressieve pijn in de onderbuik sinds gisterenmiddag. Geen koorts. Gevoelig en geprikkeld abdomen met opbraken van bruin vocht. Deze ochtend nog stoelgang.

Gisteren Augmentin 875/125 gestart en Voltaren IM gegeven, deze ochtend herhaald.

Mevrouw is gisteren om 5u wakker geworden met hevige veralgemeende abdominale pijn. Overdag heeft ze verscheidene malen moeten braken. Dit was vooral helder omdat ze veel water had gedronken doch niets had gegeten. Vandaag waren de klachten nog steeds niet beter en is de huisarts nogmaals geweest die haar dan heeft doorverwezen naar het ziekenhuis.

Ze heeft vandaag nog 2 maal moeten braken en toen had dit een donkerbruine kleur.

De voorbije 2 dagen heeft ze geen koorts gehad en is ze nog normaal naar toilet kunnen gaan (gisteren 2 maal en deze ochtend ook eenmaal). Geen diarree.

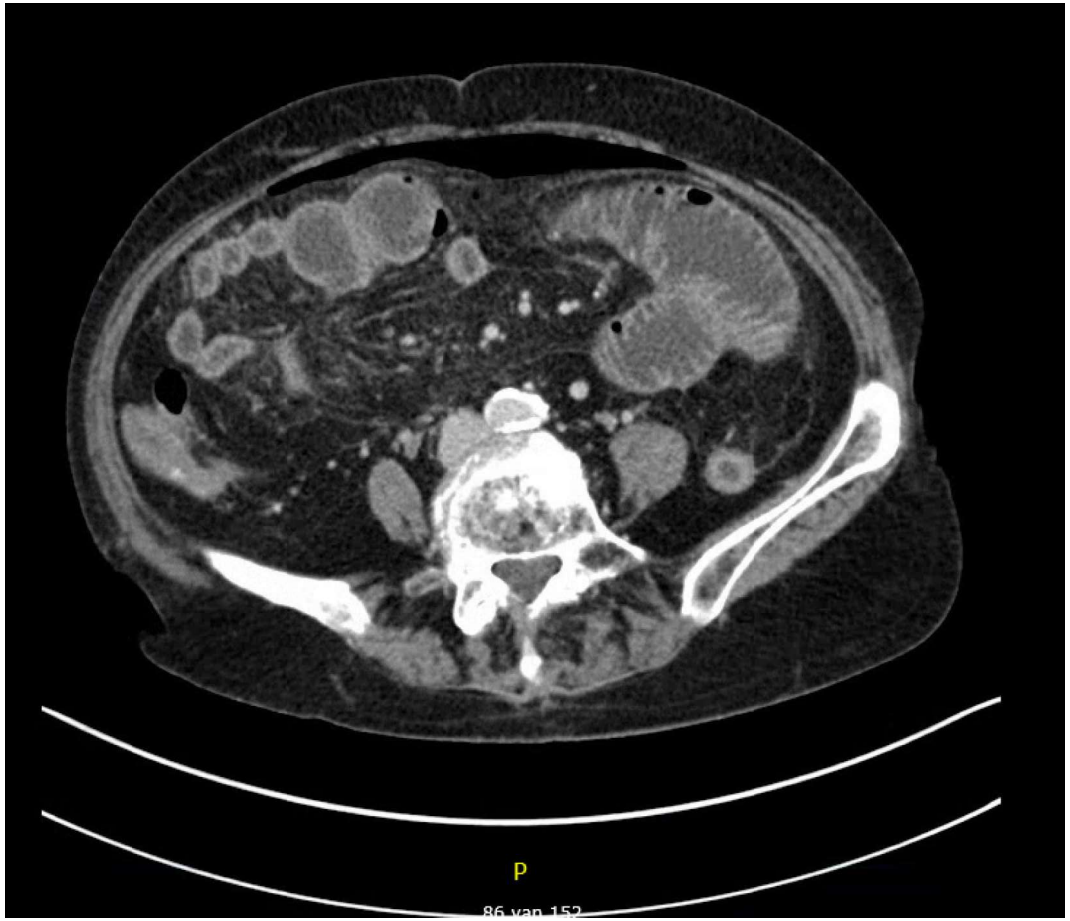
Haar eetlust is wel sterk gedaald waardoor ze naast 1 boterham niets heeft kunnen eten.

Ze is zeer moe omdat ze deze nacht niet heeft kunnen slapen van de pijn.

Patiënte is niet allergisch, heeft nooit gerookt en drinkt geen alcohol.

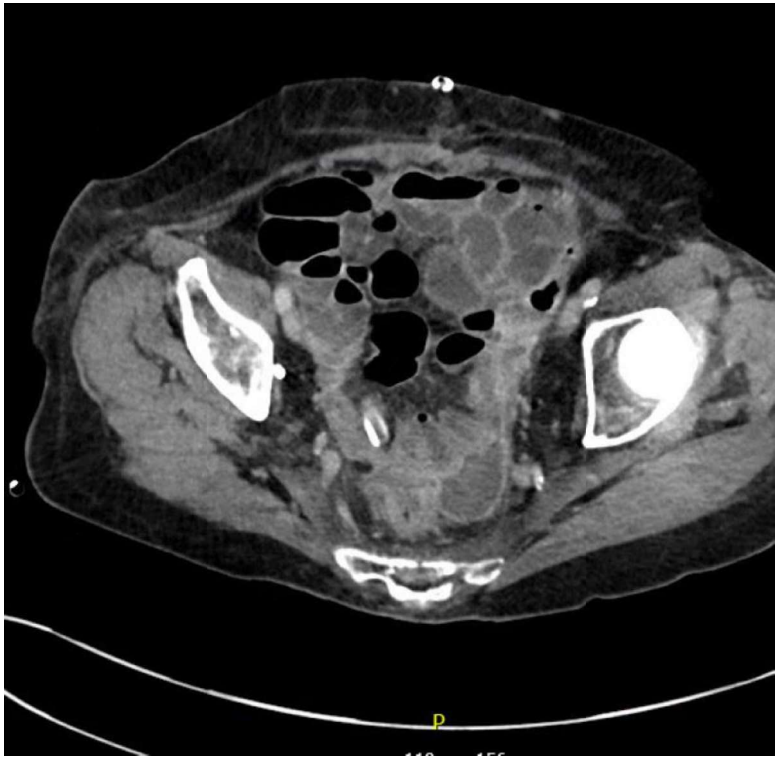
Patiënte zorgt voor hulpbehoevende echtgenoot, klaagt niet snel van pijn.

Casus vrouw 82 jaar



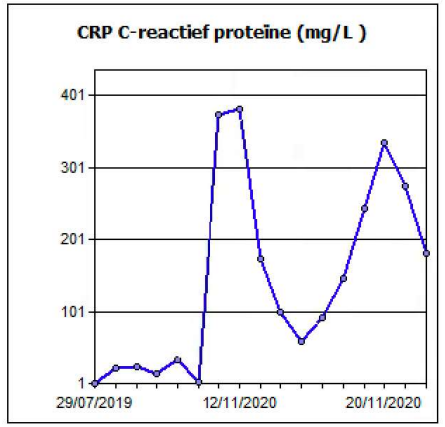
Casus vrouw 82 jaar

- Beleid?
- Hartmann in urgentie 10/11



Datum	Tijd	Waarde	Refwaarde	Eenheid/opm	Order Nr
23/11/2020	12:11	**182,9**	<5.0	mg/L	201123-2375
21/11/2020	12:18	**276,1**	<5.0	mg/L	201121-1109
20/11/2020	11:05	**334,9**	<5.0	mg/L	201120-1543
19/11/2020	11:18	**244,2**	<5.0	mg/L	201119-2102
18/11/2020	10:05	**147,9**	<5.0	mg/L	201118-1574
17/11/2020	05:43	**92,1**	<5.0	mg/L	201117-1303
16/11/2020	04:50	**58,7**	<5.0	mg/L	201116-1656
15/11/2020	05:13	**100,7**	<5.0	mg/L	201115-1227
14/11/2020	07:40	**173,3**	<5.0	mg/L	201114-1072
12/11/2020	11:45	**382,9**	<5.0	mg/L	201112-2762
11/11/2020	08:00	**volgt**			201111-0024
10/11/2020	13:49	**374,2**	<5.0	mg/L	201110-0118
30/09/2019	14:00	**2,2**	<5.0	mg/L	190930-2981
27/08/2019	14:25	**34,4**	<5.0	mg/L	190827-3000
16/08/2019	16:11	**14,2**	<5.0	mg/L	190816-2823
09/08/2019	15:47	**24,9**	<5.0	mg/L	190809-0126
02/08/2019	17:22	**21,7**	<5.0	mg/L	190802-3110
29/07/2019	09:18	**<1,0**	<5.0	mg/L	190729-1302

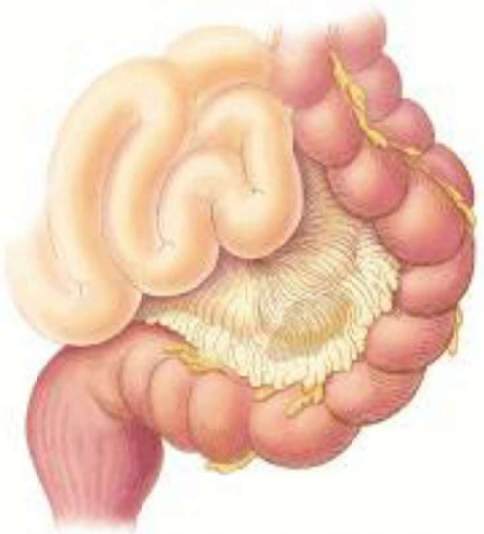
Kopieren naar excel: Selecteer de tabel volledig van lijn tot lijn, dan ctrl-C + V



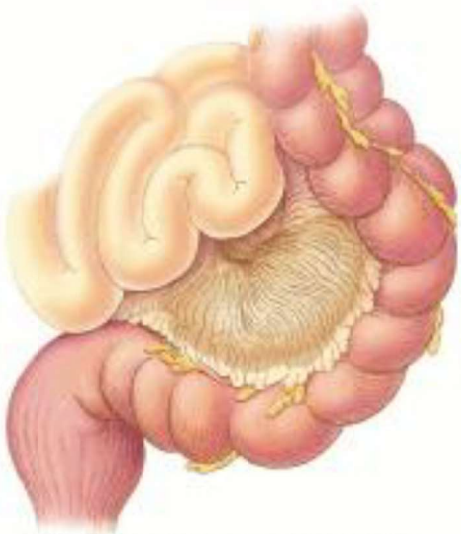
Kopieer grafiek (gebruik IE): Tabel (enkel in IE):

Laboratorium gids: CRP

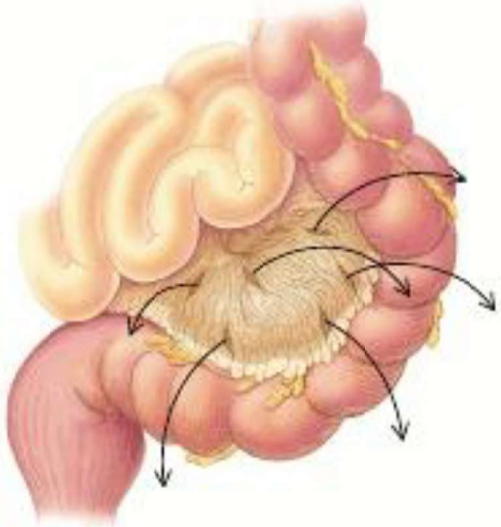
K



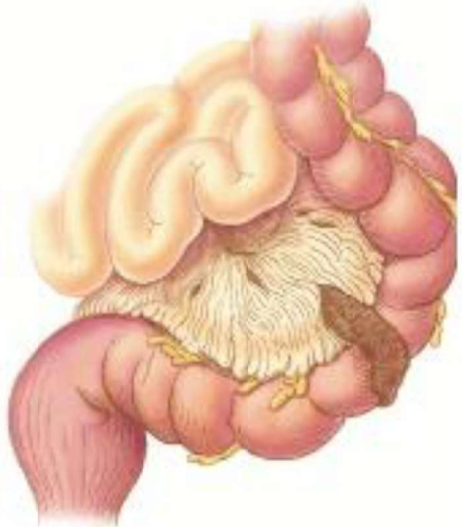
Localized Pericolic Abscess
(Hinchey Stage I)



Large Mesenteric Abscess
(Hinchey Stage II)



Free Perforation
(Hinchey Stage III)



Free Perforation Causing Fecal Peritonitis
(Hinchey Stage IV)

Hinchey 1: peridiverticulair abces

- Herhalen CT zo geen beterschap na 48u of verergering kliniek
- Bij toename abces:
  - percutane drainage
  - heelkunde

Hinchey 2: abces op afstand

- Klein abces en goede patiënt: medische therapie
- Groot abces of zieke patiënt:
  - percutane drainage (70-90% succes)
  - heelkunde

Hinchey 3: etterige peritonitis

- Medische ondersteuning en resuscitatie
- Onmiddellijke heelkunde:
  - Hartmann-procedure
    - Geen extra morbiditeit van anastomose
    - Wel morbiditeit van herstel colon
  - Resectie + primaire anastomose (loop ileostomie, on-table lavage)
    - Geselecteerde gevallen
    - Geen diepe sepsis
    - Ervaren chirurg

Hinchey 4: Stercorale peritonitis

- Medische ondersteuning + resuscitatie
- Onmiddellijke heelkunde: spoelen en Hartmann-procedure
- Mortaliteit 6-35%

Dundarmobstructie

UZ GENT

UNIVERSITEIT GENT

Cochrane Library

Cochrane Database of Systematic Reviews

Oral water soluble contrast for the management of adhesive small bowel obstruction (Review)

Abbas S, Bissett IP, Parry BR

This review addresses two questions. First, "Does the oral administration of water soluble contrast media followed by serial abdominal radiographs during the following 24 hours predict the need for early operation or resolution?"

Second, "Does the administration of water soluble contrast media in patients with adhesive small bowel obstruction facilitate the resolution of symptoms and shorten hospital stay?"

Six studies that addressed the first question were included. The pooled results indicated that oral gastrografin is a very accurate predictor of non operative resolution of adhesive small bowel obstruction with a sensitivity of 0.97, specificity of 0.96 and area under the ROC curve of 0.98.

Five studies addressed the second question were included, although Gastrografin does not reduce the need for surgery it does reduce hospital stay in those patients who do not require surgery.

Strangulatie

	Unadjusted		Adjusted		
	Odds ratio	*P*	Odds ratio	*P*	Score points
Female sex (*versus* male)	1·83 (0·87, 3·87)	0·114	Not retained		
Pain duration (≥ 4 *versus* 1–3 days)	3·29 (1·06, 10·21)	0·039	18·18 (2·24, 147·85)	0·007	1
Fever (> 38°C)	3·07 (0·66, 14·34)	0·154	Not retained		
Guarding	7·77 (3·47, 17·40)	< 0·001	5·04 (1·49, 17·01)	0·009	1
Leucocytosis (≥ 10×10^9/l)	3·81 (1·65, 8·78)	0·002	3·03 (0·86, 10·70)	0·085	1
C-reactive protein (≥ 75 mg/l)	8·07 (2·65, 24·56)	0·001	19·91 (2·41, 164·20)	0·007	1
CT: transition zone	3·72 (0·81, 17·11)	0·092	Not retained		
CT: free fluid (≥ 500 ml)	5·74 (2·61, 12·61)	< 0·001	7·15 (2·07, 24·70)	0·002	1
CT: reduced contrast enhancement	7·50 (3·11, 18·11)	< 0·001	4·87 (1·44, 16·41)	0·011	1

1- A 67-year-old woman presents with large-volume emesis secondary to a small bowel obstruction. In the past, she has had a total abdominal hysterectomy, a laparotomy with lysis of adhesions for a small bowel obstruction, and multiple hospital admissions for small bowel obstructions treated nonoperatively. Examination is benign except for abdominal distention. She has no leukocytosis, and her lactic acid level is normal. Initial appropriate management consists of which of the following?

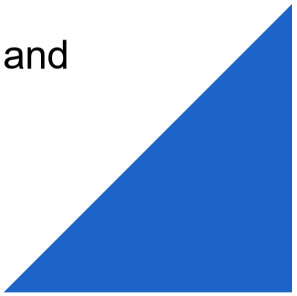
A. Insert a nasogastric tube, correct electrolytes, rehydrate, and perform serial abdominal examinations.

B. Proceed to the operating room for diagnostic laparoscopy to look for an internal hernia.

C. Proceed to the operating room for exploratory laparotomy and lysis of adhesions because she has had multiple admissions related to small-bowel obstructions.

D. Insert a nasogastric tube, administer lactulose, and perform serial abdominal examinations.

E. Insert a nasogastric tube, admit to the intensive care unit for close monitoring, and administer neostigmine.



1- A 67-year-old woman presents with large-volume emesis secondary to a small bowel obstruction. In the past, she has had a total abdominal hysterectomy, a laparotomy with lysis of adhesions for a small bowel obstruction, and multiple hospital admissions for small bowel obstructions treated nonoperatively. Examination is benign except for abdominal distention. She has no leukocytosis, and her lactic acid level is normal. Initial appropriate management consists of which of the following?

- In this elderly patient with a small bowel obstruction and a history of multiple abdominal surgeries, the obstruction will sometimes resolve without operative treatment with the assistance of nasogastric decompression. She should be rehydrated for her fluid losses and her electrolytes corrected.
- Diagnostic laparoscopy would be the correct management if cross-sectional imaging showed strong suspicion of an internal hernia. She may require operative intervention if the obstruction does not resolve, but that is not the initial treatment in this situation. Lactulose should not be administered to a person with a small bowel obstruction. It would be more useful to one with severe constipation. Neostigmine is the treatment of choice for colonic pseudo-obstruction (Ogilvie syndrome).

Casus man 48 jaar

29/03/2017: exploratieve laparotomie voor grote niertumor links (vermoeden RCC). De tumor werd

als inoperabel beschouwd gezien ingroei in duodenum en adenopathieën para-aortisch,

mediastinaal en hilair. Er werd een biopt genomen die uiteindelijk de diagnose stelt van een rhabdomyosarcoom.

18/04/2017: doorverwijzing vanuit AZ Sint-Lucas Gent voor verdere uitwerking en behandeling. Er werd een nieuwe stagering uitgevoerd met beenmergpuncties. De scans toonden een forse groei van de primaire tumor uitgaande van de linker nier onderpool met encasement van de arteria en vena renalis links, de aorta en de

vena cava inferior. In kader van trombosevorming werd therapeutisch LMWH's gestart. De beenmergpuncties waren negatief. Op CT's 3 sclerotische botletsels te weerhouden

(rib 7 links posterior; rechter os ilium en rechter os ischium). Nazicht van deze beelden op de MOC sarcomen bottumoren en uitwerking met botscan geeft de voorkeur aan haarden van fibreuze dysplasie.

19/04/2017 start IVADO (ifosfamide - vincristine - AB - doxorubicine) protocol. Behandelplan 9 cycli waarvan 4 neoadjuvant en 5 adjuvant na HK

28/04/2017: opname nav neutropene koorts.

12/07/2017: radicale nefrectomie links met RPLND

via laparotomie: rhabdomysosarcoom ypT1N1

22/07/2017: exploratieve laparotomie omwille van

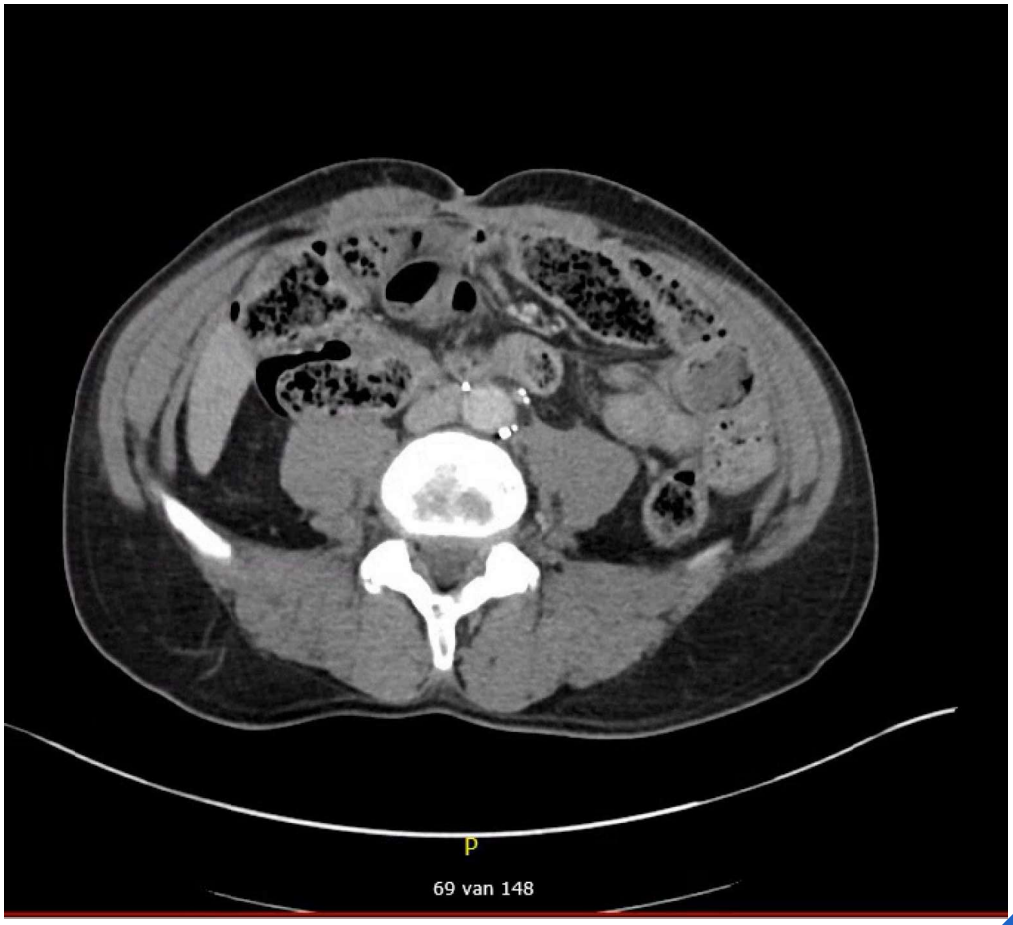
bloeding: geen duidelijke focus gevonden

Spoed

Presentatie op eigen initiatief.
Kort na de middag stekende pijn epigastrisch.
1e keer na de maaltijd voeding uitgebraakt, nadien nog meerdere keren gebraakt (fluimen).
Rond 20u bijkomende drukkende pijn thv rechter fossa. Moeite om stil te zitten.
Thuis Paracetamol ingenomen rond de middag. Buscopan ingenomen rond 20u zonder beterschap.
Geen diarree, eerder geconstipeerd. Laatste stoelgang geleden van deze middag.
Geen pollakisurie, geen dysurie, geen macroscopische hematurie.
Pijn iets beter bij het volledig uitrekken. Pijn neemt toe bij actief opspannen van buikspieren.
Geen koorts gehad. Wel koudzweet. Pijn nu VAS 7/10 (na Paracetamol en Tradonal IV). Sinds operatie af en toe ongemak thv linker hemi-abdomen, dewelke hij de voorbije dagen ook heeft gehad.

Casus man 48 jaar

- Urgente laparotomie
- strangulatie en necrose van ileumsegment
- resectie en anastomose
- dundarmfistel
  - conservatief beleid



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