Pasient kasuistikk
Refluks og funksjonell dyspepsi

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Gastromed. avd.,HUS
Funksjonelle mage-tarm sykdommer
Oktober 2017

Pasient kasuistikk

- Kvinne født i` 97, frisk fra før.
- Går på skole, bor hjemme.
- Siste 6-8 mnd gradvis oppstått kvalme og uvelhet ifm med måltid
- Symptomene er verst etter (større) måltid.
- Spiser ikke frokost. Spiser litt ila formiddagen. Føler maten stopper helt opp, men ingen direkte svelgevansker.
- Kaster ikke opp, men føler det er « like før»
- Ikke sure oppstøtt el. halsbrann. Ingen nattlige plager.
- Ingen vekttap. Avf u.a.

Pasient kasuistikk, forts.

- En del stress på skolen
- Oppsøkt fastlege flere ganger pga dette
- Normale blodprøver, inkludert cøliaki serologi.
- Henvist til gastroskopi

- Kommer til gastroskopi (ventet på US i 5 mnd)
  (nettopp kommet tilbake fra ferien, og plagene er blitt betydelig bedre).

Pasient kasuistikk, forts.

Hva forventer du å finne på gastroskopi?

1. Øsofagitt?
2. Gastritt/ulcus?
3. Ingenting?

Pasient kasuistikk, forts.

- Gastroskopi: Normale funn.

- Diagnose: Funksjonell dyspepsi (symptom basert)

- Behandling:
  -Forsøkt syredempende uten effekt;
  -Kortvarig effekt av kvalmestillende, men etterhvert spontan bedring.
  -Informasjon om viktigheten av regelmessige måltider, mindre og oftere, ikke sent om kvelden, samt at symptomene er ufarlige og går som oftest av seg selv.

Pasient kasuistikk, forts.

- 2 år senere akutt dårlig, etter at hun hadde spist hamburger, med kvalme/oppkast, vanntynn avf. (gikk over ila ½ døgn).
- Etter dette vedvarende kvalme, uttalte sure oppstøtt og halsbrann, grøtete avf (flere ggr daglig, mest etter måltid), oppblåst og magesmerter.
- Mye skolefravær pga dette.
- Normale blodprøver hos fastlege, avf prøver ikke tatt.
- Pga vedvarende symptomer, henvist til ny gastroskopi +koloskopi

Pasient kasuistikk, forts.

Hva forventer du å finne på:

A. Gastroskopi ?

1. Gastritt/ulcus?
2. Øsofagitt?
3. Ingen funn?

B. Koloskopi?

1. Kolitt?
2. Normale funn?

Pasient kasuistikk, forts.

- Gastroskopi: Utenom minimal ventrikkelslimhinne erytem, normale funn. Negativ urease test. Negative duodenale biopsier.

- Koloskopi: Normale makro- og mikroskopiske funn.

Diagnose: mistenkt postinfeksiøs funksjonell dyspepsi (FD) og IBS (irritabel tarm) etter matforgiftning

- Pga vedvarende sure oppstøtt og lite effekt av syredempende, henvist til 24 t pH måling- normale funn.

Pasient kasuistikk, forts.

- Grunnet vedvarende symptomer (oppblåst, diare) startet med lav FODMAP, blitt mye bedre etter at hun kuttet ut, melk, brød, løk, og bønner i en periode.
- Gradvis reintroduksjon av overnevnte matvarer ga ingen symptomer
- Nå ingen plager, spiser normal kost.

Funksjonell dyspepsi-definisjon

- Av gresk «dys»= dårlig

  Peptein= fordøye

  Dyspepsi= dårlig fordøyelse

- Kronisk tilstand karakterisert av smerte eller ubehag i epigastriet, tidlig metthet under et måltid, eller langvarig metthet *uten* at man ved klinisk, endoskopisk eller radiologisk undersøkelse kan finne noe unormalt som forklarer symptomene

Funksjonell dyspepsi-ROMA III

- Minst 3 mnd varighet
- Oppstått for minst 6 mnd siden
- Minst en av følgende:

  -Postprandial oppfylthet

  -Tidlig metthet

  -Smerter/brenning i epigastriet

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Overlapping Upper and Lower Gastrointestinal Symptoms in Irritable Bowel Syndrome Patients With Constipation or Diarrhea

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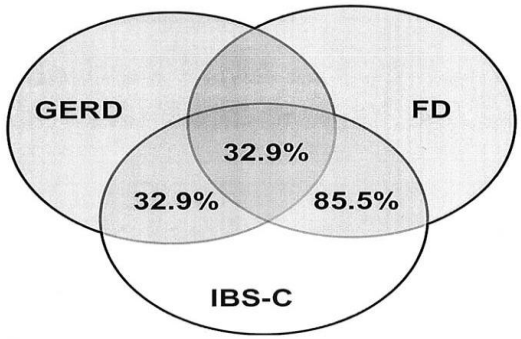
Mayo Foundation, Mayo Medical School, Rochester, Minnesota; Johns Hopkins University School of Medicine, Baltimore, Maryland; Mayo Foundation and Medical School, Scottsdale, Arizona; Novartis Pharmaceuticals Corporation, East Hanover, New Jersey

OBJECTIVES: Distinguishing between irritable bowel syndrome (IBS) and functional dyspepsia can be challenging because of the variations in symptom patterns, which commonly overlap. However, the overlap is poorly quantified, and it is equally uncertain whether symptom patterns differ in subgroups of IBS arbitrarily defined by primary bowel patterns of constipation (IBS-C) and diarrhea (IBS-D). We aimed to determine and to compare the distribution of GI symptoms, both, upper and lower, among IBS-C and IBS-D patients.

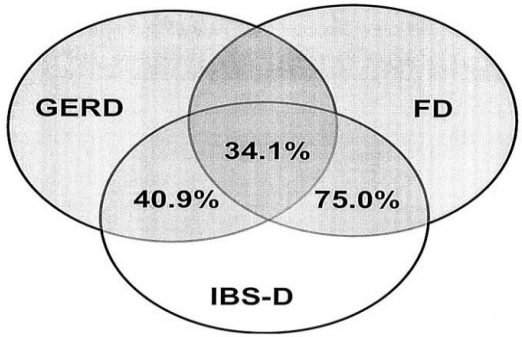
METHODS: A total of 121 consecutive patients presenting with a diagnosis of IBS were grouped according to primary bowel symptoms as IBS-C (58 women and 18 men, mean age 47 ± 17 yr) or IBS-D (26 women and 19 men, mean age 47 ± 15 yr). The Hopkins Bowel Symptom Questionnaire, which includes a brief Quality of Life assessment, and the Hopkins Symptom Checklist 90-Revised were completed by

INTRODUCTION

The functional GI disorders represent a major health burden in the United States and around the world (1–3). All of these disorders, including the irritable bowel syndrome (IBS) and functional dyspepsia, are currently defined by symptom groupings that seem to cluster together in clinical practice and in population-based studies (4–6). However, it is recognized that the symptoms commonly overlap, which has led some investigators to question the validity of subdividing the disorders based on symptoms alone (7–9). In therapeutic trials in IBS, it has become traditional to subdivide IBS patients according to primary alteration in bowel function into those patients with constipation (IBS-C) and those with diarrhea (IBS-D), based on arbitrary symptom cut-offs (3). However, the Rome committee has not endorsed this approach because of significant overlap in primary bowel symptoms (9).



A



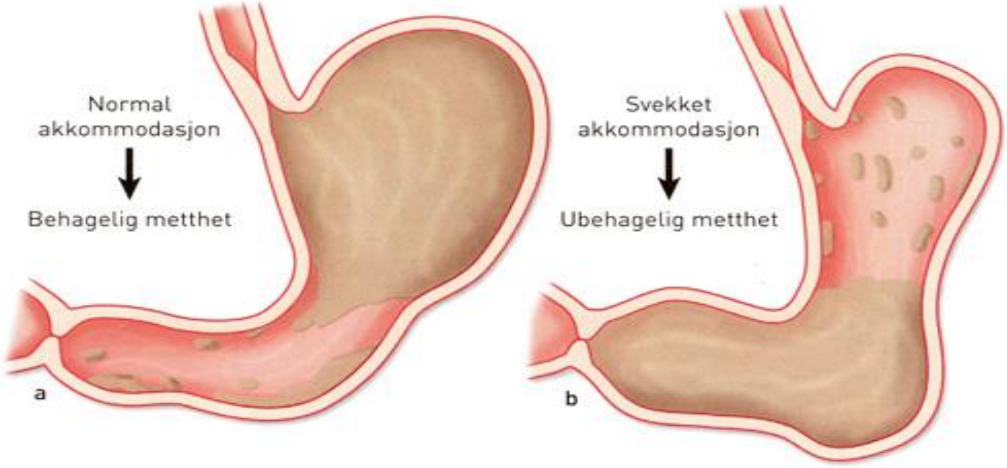
B

Funksjonell dyspepsi

- Hyppig, men underdiagnostisert tilstand
- FD prevalens på 21% (100 studier, med >312.000 deltakerne)
- Risiko faktorer: Kvinne, H pylori infeksjon, røyking, NSAIDs.
- Normale funn hos >75 % av de som er gastroskopert.
- Hyppigste funn: øsofagitt (13%) og ulcus/duodenitt (8%).
- FD påvirker livskvalitet og medfører store samfunskostnader

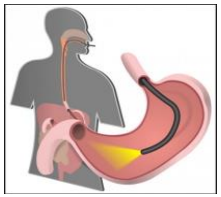
Funksjonell dyspepsi-patofysiologi

- Visceral hypersensitivitet for distensjon (mekanoreseptorer) og enkelte matvarer (kjemoreseptorer)
- Motilitetsforstyrrelser
- Nedsatt akkomodasjon i magesekken (hos ca 50 % med FD)
- (H pylori)
- CNS dysfunksjon

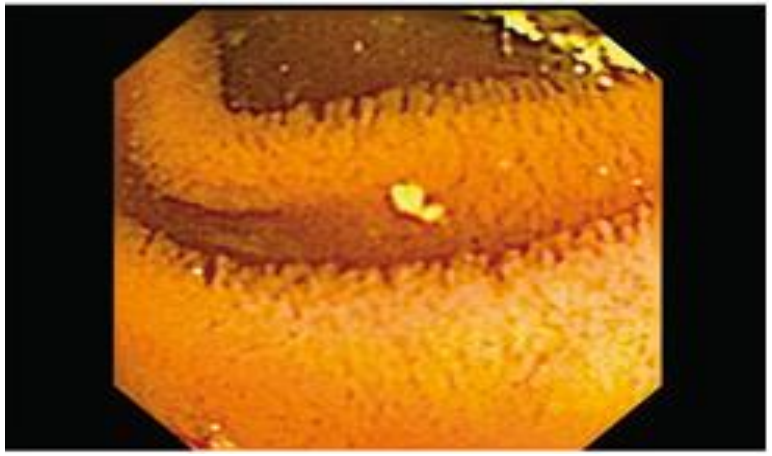


Funksjonell dyspepsi

- Mat (gluten, høy FODMAP, fett)
- Duodenale mucosale forandringer (økt permeabilitet, økt antall mastceller og eosinofiler, endret serotonin og EC celler)
- Psykososiale faktorer (angst, depresjon, somatisering).



Normale tarmtotter makroskopisk



REVIEW

CME

Acute Gastroenteritis and the Risk of Functional Dyspepsia: A Systematic Review and Meta-Analysis

Brian L. Pike, PhD, MPH[1], Chad K. Porter, PhD[1], Tia J. Sorrell, MPH[1] and Mark S. Riddle, MD, DrPH[1]

OBJECTIVES: The objective of this systematic review and meta-analysis was to estimate the risk of developing functional dyspepsia (FD) following acute infectious gastroenteritis (IGE).

METHODS: Eligible studies were identified through PubMed and EMBASE searches. Data and quality indicators were extracted by two authors from nine studies examining the risk of FD following IGE in 5,755 exposed individuals.

RESULTS: Estimates of FD risk following IGE based on a random effects model yielded a pooled odds ratio (OR) of 2.18 (95% confidence interval (CI): 1.70–2.81). Subanalyses revealed differences in the odds of FD following self-reported IGE (OR: 2.83, 95% CI: 2.10–3.81) compared with documented IGE medical encounters (OR: 1.81, 95% CI: 1.26–2.58), and a decreasing FD risk with time from IGE (≤12 months: OR: 4.76, 95% CI: 2.47–9.20 and >12 months: OR: 1.97, 95% CI: 1.51–2.56).

CONCLUSIONS: Taken together, these data suggest that the risk of developing FD is significantly increased following IGE.

SUPPLEMENTARY MATERIAL is linked to the online version of the paper at http://www.nature.com/ajg

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AP&T Alimentary Pharmacology and Therapeutics

Systematic review with meta-analysis: post-infectious functional dyspepsia

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SUMMARY

Background
The prevalence of functional dyspepsia (FD) following infectious gastroenteritis has not been systematically reviewed.

Aim
To conduct a systematic review and calculate the summary odds ratio (OR) for the development of FD following infectious gastroenteritis, as compared to a control population.

Methods
Published studies in PubMed, EmBASE, and Cochrane Database and abstracts from standard sources were screened for eligible studies. Data from studies meeting inclusion criteria were pooled for meta-analysis.

Results
Nineteen studies were eligible for inclusion. The mean prevalence of FD following acute gastroenteritis (AGE) was 9.55% (FD, $n = 909$; AGE, $n = 9517$) in adult populations. The summary OR for the development of post-infectious FD was 2.54 (95% CI = 1.76–3.65) at more than 6 months after AGE, as compared to the prevalence in controls within the same population. This is compared with the summary OR (3.51; 95% CI = 2.05–6.00) for the development of post-infectious irritable bowel syndrome (IBS) in the same population at more than 6 months after AGE. There was significant statistical heterogeneity with an I^2 of 72.8% for the summary OR of post-infectious FD. Several pathogens, including *Salmonella* spp., *Escherichia coli O157*, *Campylobacter jejuni*, *Giardia lamblia* and *Norovirus* have been shown to be associated with post-infectious FD symptoms.

Conclusions
Infectious gastroenteritis is associated with an increased risk for subsequent dyspepsia as well as for irritable bowel syndrome. Post-infectious FD and post-infectious irritable bowel syndrome may represent different aspects of the same pathophysiology. Further studies will be needed to determine this.

Postinfeksiøs IBS etter Giardia i Bergen, 2004

- I 2004 stort utbrudd av Giardia i Bergen (forurenset drikkevann).
- Det reelle antallet smittede var sanns. 5.000 – 6. 000
- Ca 2.500 ble behandlet for giardiasis.
- Ca 1.252 personer fikk påvist Giardia i avf.
- Ca 124 ble henvist til utredning pga ved magetarmplager.

Research article

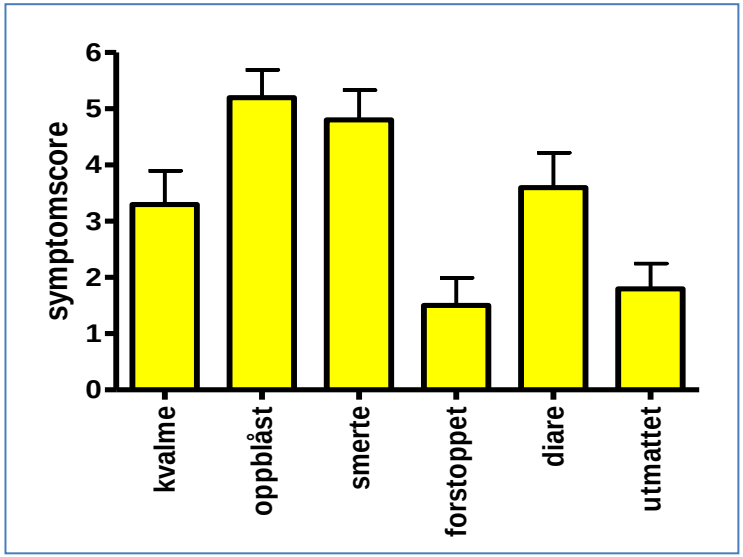
Open Access

Development of functional gastrointestinal disorders after *Giardia lamblia* infection

Kurt Hanevik*[1], Vernesa Dizdar[1], Nina Langeland[1,2] and Trygve Hausken[1,2]

Ca 12-30 mnd etter Giardia infeksjon
(PI-FGID pasienter, n=82)

- 81 % med IBS
- 24 % med FD



«Symptoms exacerbation related to specific foods were reported by 45 (57.7%) patients and to physical or mental stress by 34 (44.7%) patients».

Neurogastroenterol Motil (2007) **19**, 977–982 doi: 10.1111/j.1365-2982.2007.00988.x

Increased visceral sensitivity in *Giardia*-induced postinfectious irritable bowel syndrome and functional dyspepsia. Effect of the $5HT_3$-antagonist ondansetron

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Alimentary Pharmacology & Therapeutics

Relative importance of abnormalities of CCK and 5-HT (serotonin) in *Giardia*-induced post-infectious irritable bowel syndrome and functional dyspepsia

V. DIZDAR*, R. SPILLER†, G. SINGH†, K. HANEVIK*, O. H. GILJA*,‡, M. EL-SALHY*,§ & T. HAUSKEN*,‡

- **ULFU test:** Tegn til økt visceral hypersensitivitet med lavere drikkekapasitet hos PI-FGID pasienter.
- **Dobbeltblind placebo kontrollert 5- HT_3 (Ondansentron):** kun effekt på kvalme.

Duodenal histologi hos PI-FGID pasienter:

- ↑ antall CCK celler
- ↓antall EC (5-HT) celler

Plasma verdier før/etter karbohydrat rikt måltid:

- CCK-ingen forskjell mellom gruppene
- ↓ serotonin før og etter måltid og mer dyspepsi ift til kontrollene

Duodenal mucosal lymphocytes in patients with persisting abdominal symptoms after *Giardia lamblia* infection

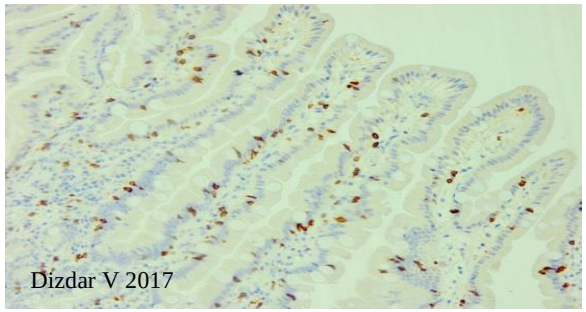
[1]Vernesa Dizdar, [1]Kurt Hanevik, [2]Ole Didrik Lærum, [1,3,4]Odd Helge Gilja, [1,4]Nina Langeland, [1,4]Trygve Hausken

[1]Institute of Medicine, University of Bergen, Norway, [2]The Gade Institute, Department of Pathology, Bergen, Norway. [3]National Centre for Ultrasound in Gastroenterology. Department of Medicine, Haukeland University Hospital, Bergen, Norway. [4]Department of Medicine, Haukeland University Hospital, Bergen, Norway

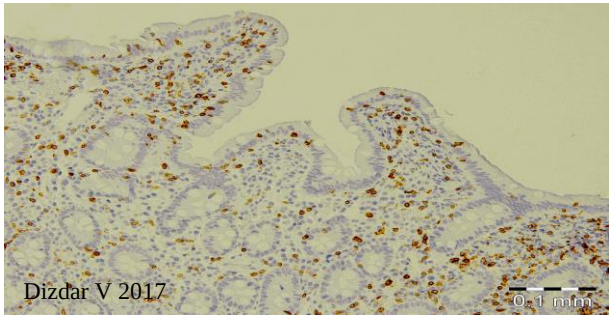
Immunhistokjemi av T og B celler i duodenal mucosa hos post Giardia PI-FGID pasienter (range 3-18 mnd)

- Endret T celle (CD4 og CD8) hos PI-FGID med normalisering over tid
- Vedvarende forhøyet B celle (CD20) tall hos PI-FGID pasienter

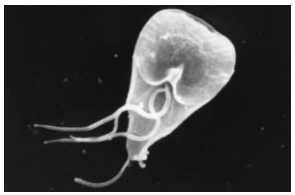
Normale tarmtotter mikroskopisk



Tarmtotteatrofi



Postinfeksiøs FD and IBS etter Giardia



- Infeksjon med Giardia i Bergen er assosiert med økt risiko for vedvarende magetarm plager samt økt risiko for kronisk utmattelse

  (Oppfølgingsstudier etter 1,3, 5 og 10 år, Wensaas K , Hanevik K, et al)

- En slik sammenheng er ukjent fra før og funnene er unike i verdenssammenheng