Functional Diarrhea

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WDHW 2026


انجمن متخصصین گوارش و کبد ایران
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Functional Diarrhea

- Review possible pathophysiology
- Describe epidemiology
- How to define
- How to diagnose
- Doctor-patient relationship as a treatment modality
- Controlling symptoms
- Life style including diet
- Mental health consult

Functional Diarrhea Pathophysiology

- Motility disturbance/Accelerated & shortness colon transit time
- Altered mucosal and immune function/ Altered gut microbiota
- Altered central nervous system processing
- Bidirectional signaling between the CNS and ENSD
- Altered sympathetic/parasympathetic balance
- AbNl Serotonin(5-HT) release or reuptake
- Dietary anad Luminal Factors:poor intolerance to osmotic load and motility(FODMAPs,caffein,artificial sweeteners, fatty food, lactose/ fructose)
- Bile acid-related diarrhea

Functional Diarrhea Prevalence

- The worldwide prevalence is up to **3-5%**, 1/3of worldwide population have DGBI,
- Similar prevalence between men and women or slight male predominance, **smokers**, and people **taking NSAID agents**.

Differential Diagnosis

- IBS-D
- Chronic parasitic infection/Giardia
- Chronic bacterial infection/C.diff
- IBD/Crohn's disease
- Microscopic Colitis
- Malabsorption Disorsers/ Celiac-Lactose-Fructose
- Chronic pancreatic exocrine insufficiency
- Bile acid malabsorption/post ileal resection
- Post-cholecystectomy diarrhea
- Hyperthyroidism
- Diabetes Mellitus with autonomic neuropathy
- Adrenal InsufficiencyInfiltrative diseases of the stomach (eg, Crohn disease, sarcoidosis)
- Medications (including metformin , proton pump inhibitors, SSRIs, Antibiotics, Magnesium containing medications, laxatives)
- Colorectal cancer/large villous adenoma/NET
- Post surgical short bowel sx, post-vagotomy,
- Ischemic bowel disease,
- Systemic disorders (parathyroid disorders, connective tissue disease)

Functional Diarrhea Definition

- **Loose or watery stools in more than25%of bowel movements with little or no predominant abdominal pain.**
- **Frequently associated with fecal urgency; bloating, and sometimes fecal incontinence.**
- Recurrent at least **1 day per week**, and in the last 3 months
- Criteria fulfilled for 3 months with symptom onset at least 6 months before diagnosis.
- The absence of alarm symptoms reduced the likelihood of organic disease

Alarm Signs

- 🚩 Unintentional weight loss
- 🚩 GI bleeding
- 🚩 Onset at older age
- 🚩 Elevated ESR/CRP
- 🚩 Hypalbuminemia
- 🚩 Nocturnal
- 🚩 Unexplained iron deficiency anemia
- 🚩 Fever
- 🚩 Palpable mass or lymphadenopathy
- 🚩 Family history of CRC/IBD

Functional Diarrhea, Clinical Evaluation

The diagnosis is made based on:

- Clinical history
- Physical examination
- Laboratory tests
- ***When indicated*** an endoscopy or other appropriate tests; celiac disease in a patient with positive serologies, breath test for SIBO with risk factors and colonoscopy for IBD, microscopic colitis, eosinophilic colitis.

Nutritional Habit in FD

- Low FODMAP/LACTUSE/FRUCTOSE if intolerant
- Reduction Cafeine
- Avoid excess alcohol
- Limited artificial sweetners/sorbitol, mannitol.
- Reduction fatty /spicy foods
- Identification of trigger foods

Medical Treatment

- **Loperamide**
- **Cholestyramine-Colesvelam /BAD**
- **Microbiom targeted med:Antibiotics/Probiotics**
- **Psychologica therapy: stress reduction/CBT/relaxation**
- **TCA and SSRIs/NSRI**.
- For patients with persistent symptoms, the **tetracyclic antidepressant, mirtazapine** may prove beneficial.
- Alternatively, low-dose **buspirone** (an azapirone) before meals may improve post-prandial symptoms.

Evaluation of Persistent Symptoms

- Patients with continued symptoms of diarrhea should be carefully reassessed, paying specific attention to
- **the type of ongoing symptoms**,
- **the degree to which symptoms have improved or worsened**
- , and **compliance with medications**.

Management

- Symptom control
- Improved QOL
- Treatment of contributing Dietary or psychological factores

Thanks for attention,
Any Question