

DIARRHEA

Definition	- 3 or more loose or liquid stools per day - Abnormally high fluid content of stool (> 200-300 gm/day) (normal=100)			
Fecal osmolarity	-normal: = serum osmolality (290 mOsm/kg). -normal stool osmotic gap: (< 100 mOsm/kg)			
Classification	1.Acute	2 weeks		
	2.Persistent	2 to 4 weeks		
	3.Chronic	4 weeks in duration		
Categories	1. Secretory	-cause: ↑ active secretion - High stool output - NO response to fasting - Normal stool osmotic gap (< 100 mOsm/kg) -bacterial toxin (E. coli , cholera) + Endocrine tumours مهم*		
	2. Osmotic	-cause: ↓absorbed substances " malabsorption " -normal stool output - Improve by Fasting - High stool osmotic gap (> 125 mOsm/kg) -lactose intolerance + osmotic laxatives. مهم*		
	3. Exudative (inflammatory)	-cause: inflamed or ulcerated mucosa - blood and pus in the stool. مهم - NO response to fasting -inflammatory bowel diseases + invasive infections.		
	4. Motility-related	-cause: rapid movement of food through the intestines (hypermotility). - Irritable bowel syndrome (IBS)		
Aetiology	Acute diarrhea	• Infections Most common	VGE Most common	Rotavirus Most common (hospitalizations- under 5)
		• Food poisoning		
		• Drugs	Antibiotic-Associated Diarrheas broad-spectrum> Clostridium difficile	
	Chronic diarrhea	• Infection: e.g.Giardia lamblia . AIDS		
• Post-infectious: Following acute infections				
		• Malabsorption • Inflammatory bowel disease (IBD) • Endocrine diseases. • Colon cancer • Irritable bowel syndrome.		
Complications	Fluids → Dehydration Electrolytes → Electrolytes imbalance Sodium bicarbonate → Metabolic acidosis If persistent → Malnutrition			
Tests	Acute diarrhea	Fecal leukocytes > present> Inflammatory Diarrhea> mucosa damage Fecal leukocytes > <u>not</u> present> <u>non</u> -inflammatory Diarrhea> <u>no</u> mucosa damage		
	Chronic diarrhea	Stool analysis (Ova, parasites) > + > Infection Stool fat test > + > Malabsorption Stool fat test > - > Secretory or Noninfectious inflammatory diarrhea		