

DISORDERS OF L. INTESTINE

CONSTIPATION:-

- SLOW MOVEMENT OF FECES THROUGH L. INTESTINE
- EXCESS ABSORPTION OF FLUID / INSUFFICIENT FLUID INTAKE

LARGE QUANTITIES OF DRY, HARD FECES IN DESCENDING COLON.

REASONS:-

- TUMORS
- ADHESION THAT CONSTRICTS INTESTINE
- ULCERS
- SPASM OF SEGMENT OF SIGMOID COLON

IF CONSTIPATION CONTINUES FOR SEVERAL DAYS:-

EXCESS FECES ACCUMULATION ABOVE SPASTIC SIGMOID COLON

↓
EXCESSIVE COLONIC SECRETIONS

↓
DIARRH~~EA~~

↓
[BOUNTS OF ALTERNATING CONSTIPATION + DIARRH~~EA~~]

CONSTIPATION
↓
DIARRH~~EA~~
HIRSCHSPRUNG (MEGACOLON)



DIARRHEA :-

→ RAPID MOVEMENT OF FECAL MATTER THROUGH L. INTESTINE

REASONS :-

- (i) ENTERITIS - INFECTIOUS DIARRHEA
- (ii) CHOLERA
- (iii) ULCERATIVE COLITIS
- (iv) PSYCHOGENIC DIARRHEA

1) ENTERITIS :- INFLAMMATION OF INTESTINAL TRACT

- CAUSED BY VIRUS/BACTERIA (INFECTIOUS DIARRHEA)
- MOST EXTENSIVE IN L. INTESTINE & DISTAL END OF ILEUM
- MUCOSA BECOMES IRRITATED

↓
RATE OF SECRETION BECOMES GREATLY ENHANCED

2) CHOLERA :- CHOLERA TOXIN



↑ SECRETION OF FLUIDS & ELECTROLYTES FROM
CRYPTS OF LIBERKUHIN IN DISTAL ILEUM & COLON



LOSS OF FLUID & ELECTROLYTE → DEATH

Tx :- REPLACE FLUID AND ELECTROLYTE BY GIVING
IV SOLUTIONS

SECRETION → 10-12 L/DAY
ABSORPTION → 6-8 L/DAY

3) ULCERATIVE COLITIS:-

- ULCERATIONS & INFLAMMATION OF WALLS OF L. INTESTINE
(ACTS AS IRRITANT)

↑
- ENHANCED MASS MOVEMENT OCCUR THROUGHOUT DAY
- COLON SECRETIONS ARE ENHANCED.

REASONS → • ALLERGY

• IMMUNE DESTRUCTION

• CHRONIC BACTERIAL INFECTION

It → SEVERE CASES

• ILEOSTOMY (COMMUNICATⁿ OF S. INTESTINE TO EXTERIOR)

• SURGICAL REMOVAL OF COLON

4) PSYCHOGENIC DIARRHEA:-

NERVOUSNESS → EXAMS
↓
BATTLE FIELD...

↑ STIMULATION OF PARASYMP. NERVOUS SYSTEM



INCREASE IN 1) MOTILITY

2) MUCOUS SECRETION



PSYCHOGENIC EMOTIONAL DIARRHEA.

HIRSCHSPRUNG DISEASE (MEGACOLON) :-

→ ALSO KNOWN AS CAM (CHRONIC AGANGLIONIC MEGACOLON)

→ D/T DEFICIENCY OF GANGLION OF MYENTERIC PLEXUS IN SIGMOID COLON

D/T DEFECT IN NEURAL CREST MIGRATION

D/T ABNORMALITY IN RET GENE (TYROSINE KINASE GENE)

→ NEITHER DEFECACTION REFLEX
NDR PERISTALTIC MOTILITY IN L. INTESTINE

FECES ACCUMULATION

CAUSES DISTENTION OF COLON → MEGACOLON
(3-4 INCHES)

EFFECTS :-

CONSTIPATION IS SO SEVERE, BOWEL MOVEMENT OCCURS
✓ ONCE EVERY SEVERAL DAYS
OR
✓ ONCE A WEEK.