DISTURBANCES OF GI TRACT PASSAGE

SEMINARY 2.LF

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TERMINOLOGY

- NAUSEA
- REGURGITATION
- VOMITING
- SLOW – MOTION PASSAGE
- CONSTIPATION
- BOWEL OBSTRUCTION
- DIARRHEA

PASSAGE DISTURBANCES

- SYPTOM
- REASONS – WIDE HETEROGENIC GROUP OF DISEASES – ALL BODY SYSTEMS – ALL MEDICAL BRANCHES
- SYSTEMATIC APROACH – FROM THE MOST FREQENT AND SIMPLE - TO RARE AND DIFFICULT TO SEE
- THE IMPORTANT AIM – EXCLUDE SIGNS OF ACUTE ABDOMEN
- THE BASIC POINT IN MANAGEMENT IS HISTORY AND ITS WIDENNING THROUGH ANSWERS
- SECOND STEP - PHYSICAL EXAMINATION – WHOLE AND SUBSEQUENTLY LOCAL SIGNS
- THIRD STEP – SETTING UP OF WORKING DIAGNOSIS AND PLANNIG OF SPECIALIZED TEST, EXAMINATIONS

VOMITING

- HISTORY:
- Frequency of vomiting: day time, depending on meal….
- Content of vomit: saliva + nondigeted meal, stomach content, bile colouring, bowel secretion (miserrere)
- Context with pain
- Relief from nausea after vomiting
- Loss of weight
- Use of medication, dietetic habits and dietetic mistakes
- Living and working enviroment (poisons – acute or chronical expositions)

PHYSICAL EXAMINATION

- WHOLE BODY EXAMINATION
- TARGET ON RESULTS OF VOMITING
- HYDRATION (skin turgor, wetness mucosae, eyes)
- BP, P, TT

- LOCAL PHYSICAL EXAMINATION
  - INSPECTION: hernias, scars, elevation of abdominal wall
  - PALPATION: tension, peritatic movement, maas, peritoneal signs (Blumberg, Rovsing)
  - PERCUSION: meteorism, peritoneal signs (Plenies)
  - AUSCULTATION: peristaltic sounds,
  - P.r.: stool in rectal ampula, pain…

REASONS OF NAUSEA AND VOMITING

- GASTOINTESTINAL TRACT
  - **Inflammatory irritation: acute gastroenteritis,** meal toxins or poisons, alcoholic gastitis, esophagitis
  - **Obstruction**: a) oesophagus: achalasia, strictura, tumor, b) stomach: tumor (large), c) **pylorostenosis**: benign (ulcer disease), malign, d) bowel: **ileus -** late symtom
  - **Reflex – irritation of splanic nerves:** THE START OF INFLAMMATORY ACUTE ABDOMEN (apendicitis), billiary colic (renal renální), acute pancreatitis

REASONS OF NAUSEA AND VOMITING

- METABOLIC DISEASES
  - **Urémia, diabetes**, liver failure, Addison disease, hyperpara a hyperthyreosis
- TOXIC REASONS
  - **! DRUGS:** digitalis, antirevmatics, sulfonamids, tetracyklins
  - Poisoning: solvents, lead, alcohol
- CENTRAL NERVES REASONS
  - vascular: migraine, Menié r syndrom
  - intracranial pressure elevation (tumors, bleeding)
- PSYCHIATRIC FIELD (PSYCHOLOGY FIELD)
  - mental insult
  - neurosis
  - anorexia
- GRAVIDITY

CLINICAL MANAGEMENT

- WITH OBVIOUS SIGNS OF EKSICOSIS – THE FIRST ACTION IS REHYDRATION
- In not serious cases and the most common forms (gastritis) – try oral intake – ice liquids by spoon (tea, cola)
- Serious forms: infusion therapy
- LABORATORY: minerals (Na,K,Cl) mandatory, standard biochemistry: liver tests, urea, kreatinin, amyl. S, glykemy, BC (Hkt confirm dehydration), consideration of HCG (fertility women)
- IN OBSTRUCTION CASES – CONTRAST X-RAY, resp. CT with double contrast is excellent choice – can show highness of obstruction, organ perfusion…
- ENDOSCOPY to know reason
- OTHER SPECIALIZED EXAMINATIONS ACCORDING HISTORY AND CLINICAL SIGNS (surgery, neurologic, gynekology…..)

DYSFAGIA

- UPPER OR LOWER TYPE
- REASONS: intramural stenosis – problem is in the wall (tumor, diverticul, myositis), extramural pressure (tumor, nodes, lusoria, diaphramatic hernia), mucosae inflamm., central nerves systém reason (stroke results), neuromusle fault (achalasie), psychiatris reasons (globus hystericus)

- EXAMINATIONS:
  - ENDOSKOPY
  - X – RAY WITH contrast
  - MANOMETY
  - NEUROLOGIC
  - ENT
  - (HISTOLOGY)

CONSTIPATION

- QUESTION ABOUT FREQUENCY OF STOOL (3xweek?)
- Acute versus chronic
- HABITUAL OBSTIPATION
- CHANGE IN FREQUENCY AND CONSISTENCY IS IMPORTANT !!
- Changing live style and live conditions
- ! HIGH INCIDENCY OF COLORECTAL CARCINOMA (increasing round the world) !
- Reason of constipation in usualy detectable through patient´s history
- Phyzical examination has role: do not forget per rectum (50% of rectal carcinoma is palpable by finger)

REASONS OF CONSTIPATION

- OBSTRUCTION OF LOWER GI TRACT (upper tract cause rather vomiting)
  - Tumors – be rising from bowel wall !CRC, (external pressure is low fr. – but late syptom – gynecology, urology or any rare tumors)
  - Inflammatory or cicatrices stenosis (Mb. Crohn, colitis, divetikulosis, ischemick colitis, inflammatory changes after radiation
- MALFUNCTION OF BOWEL MOTILITY
  - Endocrinal: myxedem, hyperparath., hyperkalcemia, hypokalemia, porfyria
  - Medication: opiate, tranquillizers, antidepresiv drugs, anticholinergic, antacids
  - Poisoning: lead, others chemical sustances
  - Neurologické: Hischprung disease, diseases of CNS and spinal cord
  - Psychiatric: endogenic depression
  - External reasons: imobilization, lack of fluids
  - Autoimmunity diseases (sclerodermia)

MANAGEMENT OF CONSTIPACY

- LABORATORY: BC, mineralogram, liver tests, urea, kreatinin, glykemia
- Colonoskopy , alternatively biopsy on cholinesterasis
- CT with contrast
- Hormonal examination: THS, T3
- Other examinations according diagnostic consideration: gynekology, neurology, ….. psychiatric

DIARRHEA

- MORE FREQUENT BOWEL MOVEMENT (min. 3 stools/day) with REDUCED CONSISTENCY
- AT USUSAL DISORDER OF ALL BOWEL FUNCTIONS: sekretion, digestion, absorbtion, motility
- ACUTE DIARRHEA: it is (exception special cases) not for instrumental examination – infectious or toxic etiology
  - Risk of dehydration
- CHRONIC DIARRHEA
  - Risk of malabsorbtion

ACUTE DIARRHEA

- VIRAL ETILOGY AS THE MOST COMMON REASON: ENTERO, ROTARO, ADENOVIRY
- BACTERIAL ETIOLOGY: SALMONELA, SHIGELA, ENTEROBACTER, ESCHERICHIA some strain, CLOSTRIDIUM, STAFYLOKOK
- SUPERINFECTION DURRING PŘI ATB TREATMENT (often pseudomembranous diarrhea with blood)
- IBD (Crohn, colitis) – stool with additive blood
- POISONING: lead, mercury, solvents
- ALERGY or INTOLERANCE (METABOLIC DISEASE): milk, eggs, fish, strawberies, mushrooms – usualy easy to diagnose through history

ACUTE DIARRHEA

- PATIENT´S IS IMPORTANT INCLUDING EPIDEMIOLOGY HISTORY
- ! in suspection on epidemiological connection and sourse – report to hygiene servise is mandatory
- Clinical examination – whole body and local (abdomen), control of stool
- ! Non specific signs and diarrhoe – can start acute abdomen – in unclear cases repeat examination after 2 – 6 hours (or consult surgery)
- BC, minerals, basic biochemistry
- **Send stool to cultivation** (question when – the most summer viral diarrheas go through without; holiday diarrhea typically…)
- Treatment: dehydration signs – income of fluids, infusions
- Do not indicate chemotherapeutics or ATB without cultivation (stool tests) – it can be used after – not blind)

CHRONIC DIARRHEA

- LONG LINE OF POSIBLE REASONS
- BOWEL DISEASES ZÁNĚTLIVÁ ONEMOCNĚNÍ STŘEVA
  - CHRONIC INFECTIONS, IBD, divertikulitis
  - VASCULAR PROBLEMS (BOWEL CHRONIC ISCHEMIA)
- BOWEL TUMORS
  - benign.: polyposis, Peutz Jagers sy
  - Malign: carcinoma, sarkoma, lymfoms
- ENTEROPATHY
  - Gluten, lactosa
- ENDOCRINOLOGY Hyperthyreosis
  - Tumors with endocr. secretion (Zollinger Elison, karcinoid)
  - Hypoparathyreosis
  - Addison disease

CHRONIC DIARRHEA

- NEURO REASONS
  - Neuropathy with DM, alkoholism
- MALDIGESCTION
  - Chronic pankreatitis, atrofic gastitis, liver dysfunctions
- DIETETIC HABITS
  - Meals cause diarrea
  - Beer
- MEDICAMENTS
  - Laxans
  - Digitalis
- CHRONIC DIARRHOE WITHOUT REASON (FUNCTIONAL)
  - Colon irritable
  - No objective finding – reason

CHRONIC DIARRHEA

- HISTORY
- Whole body examination: loss of weight, palp. of thyreoid, BP, P, TT
- Local examination: 5x
- Stool examination (virus, bacterial, parasites)
- Biochemistry
- Endoskopy (mucosis biopsy)
- Hormonal lab
- Imaging methods (sono, CT)

STOP OF GAS FLOW AND STOOL

- USUSALY ACUTE ABDOMEN (ileus)
- SERIOUS CONDITION – RISK OF LIFE
- Many reasons: ! high incidence of CRC
- History: last passage disturbances, suffer surgery
- Physical examination: signs are changing durring the time (hours)
- Local examination: 5x
- Surgery consultation is needed !
- Laboratory
- X-RTG
- CT (double contrast)