Propedeutics of internal medicine as an introduction to clinical medicine.

The basic methods of patients' examination.

Anamnestical part of case history.

Propedeutics of internal medicine as an introduction to clinical medicine

Hours - 195
Credits – 6,5
Lectures – 60 hours (30)
classes – 90 hours (30)
Individual work – 60 hours

Module 1. “The main methods of patients’ examination in clinical medicine”
18 themes
3 intermediate test controls
educational case history (anamnestic part)

Qui bene interrhogat, bene diagnoscit
Qui bene diagnoscit, bene curat

Physical examination or ***clinical examination*** is the process by which a health care provider investigates the patient and his body for signs of disease

Propedeutics to internal medicine (lat.propedeo- introduction to discipline) studies the diagnostic of diseases and methodological approaches to detection of illness

Amat victoria curam!

Victory loves assiduous!

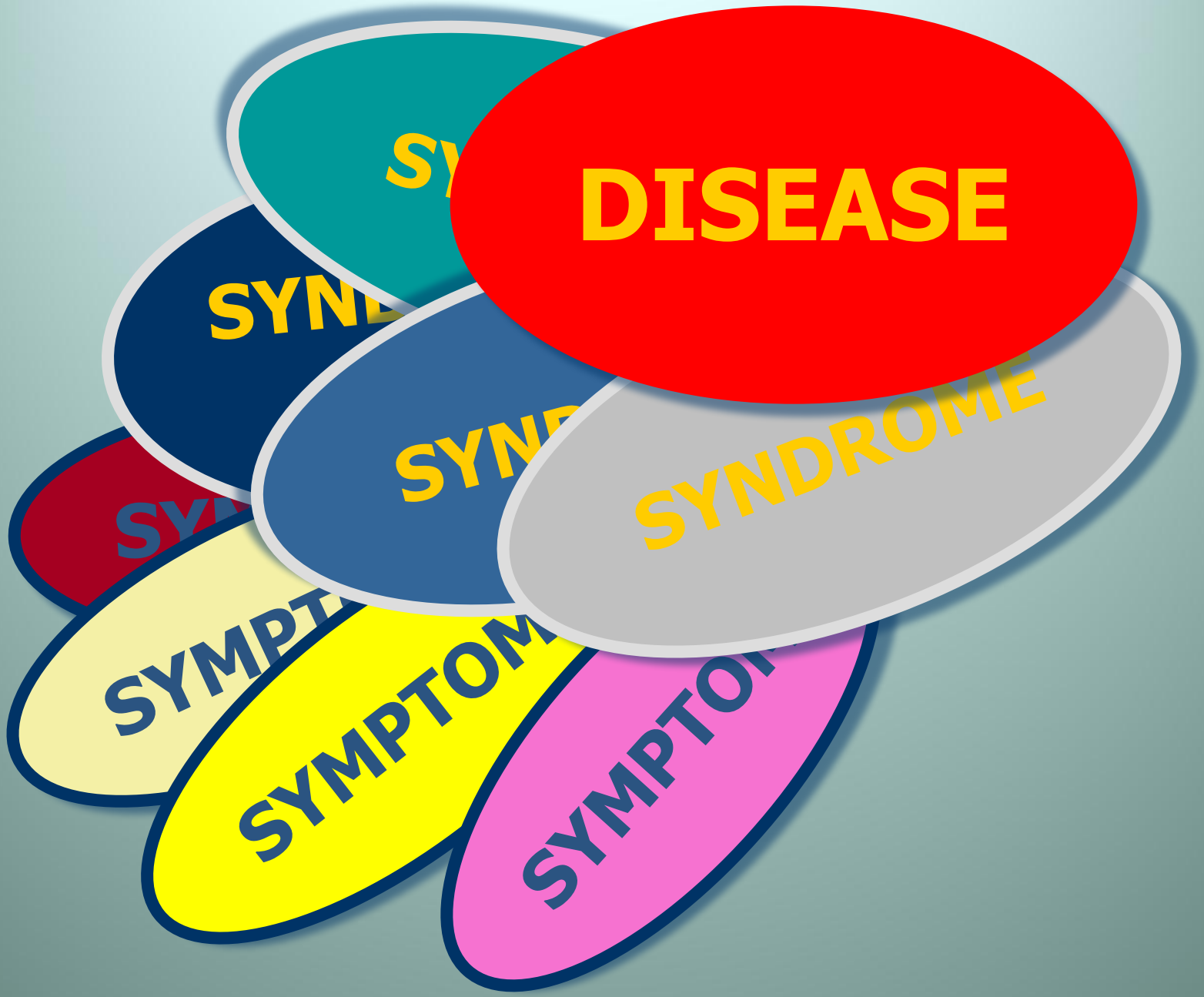
Katull

Three basic aspects make essence of professional medical activity:

- **diagnostics** (diagnostica)
- **treatment** (curatio)
- **prophylaxis** (prophilactica)

Sergey Botkin
1832-1889

"The most important and essential objectives of practical medicine are the prevention and treatment of disease, and the alleviation of the patient's suffering"


DISEASE
SYNDROME
SYMPTOM

Qui bene diagnoscit, bene curat
Qui bene interrhogat, bene diagnoscit

Symptom (gr. symptoma – sign) **– a sign (appearance) of disease according to patient's subjective feeling or objectively detected by physician.**

Syndrome – the set of symptoms based on common pathogenesis.

International Statistical Classification of Diseases and Related Health Problems (ICD-10).

is the United Nations-sponsored World Health Organization's "standard diagnostic tool for epidemiology, health management and clinical purposes."

The ICD is designed as a health care classification system, providing a system of diagnostic codes for classifying diseases, including nuanced classifications of a wide variety of signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or disease.

Diagnosis or diagnostics

Diagnostics **(Gk dia - through, gnosis - knowledge) is the science of methods by which diseases are identified**

Process of identifying a medical condition or disease by its signs, symptoms, and from the results of various diagnostic procedures.

The conclusion reached through this process is called *a diagnosis*.

"Diagnostic criteria" **- combination of symptoms which allows the doctor to ascertain the diagnosis of the respective disease.**

Diagnosis or diagnostics

Diagnostics includes:

- ***medical diagnostic technique -*** **the study of methods of observation and examination of the patient (physical and laboratory-instrumental methods);**
- ***semeiology (Gk semeion sign) or symptomatology*** **- study of the diagnostic value of the symptoms of the disease;**
- ***diagnostic methods -*** **the study of special ways of pondering aimed at identification of the disease**

"... To treat not the disease but patient ..."

Mudrov M..Y. 1779-1831

"Mediocre doctor more harmful than helpful..."

Cathedra of propaedeutic to internal medicine № 1

of National medical university

1928 – the cathedra of propedeutics to internal medicine was established by the integration of cathedras of diagnostic and nosological pathology

Professor Gubergritz M.M. - the first head of cathedra (1928 -1951)

Cathedra of propaedeutic to internal medicine № 1

of National medical university

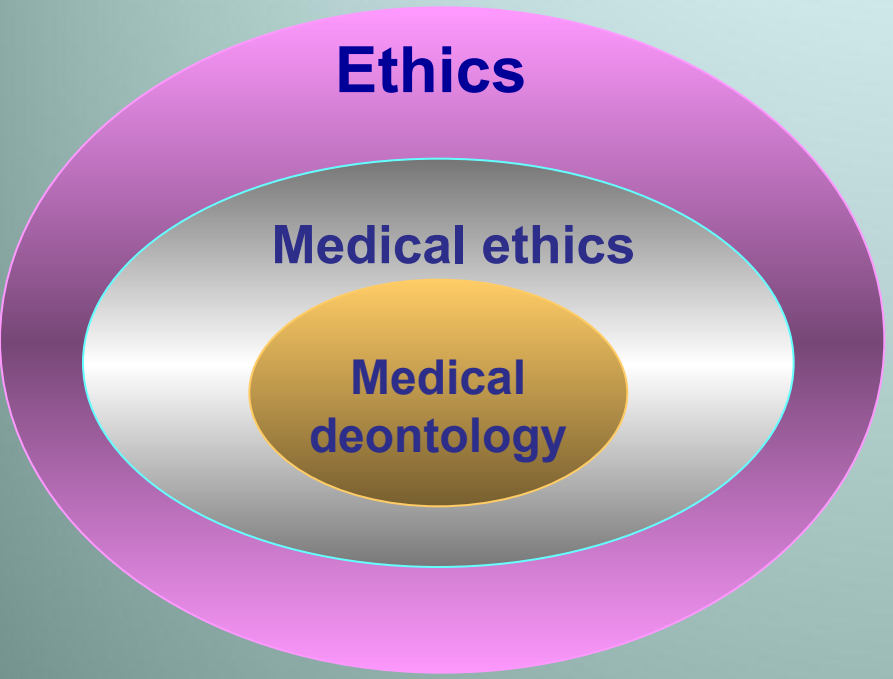
1988 – present day head of cathedra

Professor V.Z. Netyazhenko

Main directions of cathedra's scientific work:

- study of questions of blood coagulation in different pathology
- pathogenesis of ischemic heart disease, arterial hypertension, modern methods of treatment and prognosis their course
- pathogenesis and treatment of arrhythmias
- clinical pharmacology of traditional and modern cardiovascular medicines

Definition of ethics, medical ethics, medical deontology



Ethics – the science of morals, rules and requirements for social conduct

Medical ethics – part of **ethics** , which determins moral valuable doctor's behavior in his professional area.

Medical deontology (gr. deon - duty) - the set of rules and principles of medical ethics, which governs a member of the medical profession in the exercise of his professional duties.

Medical deontology:

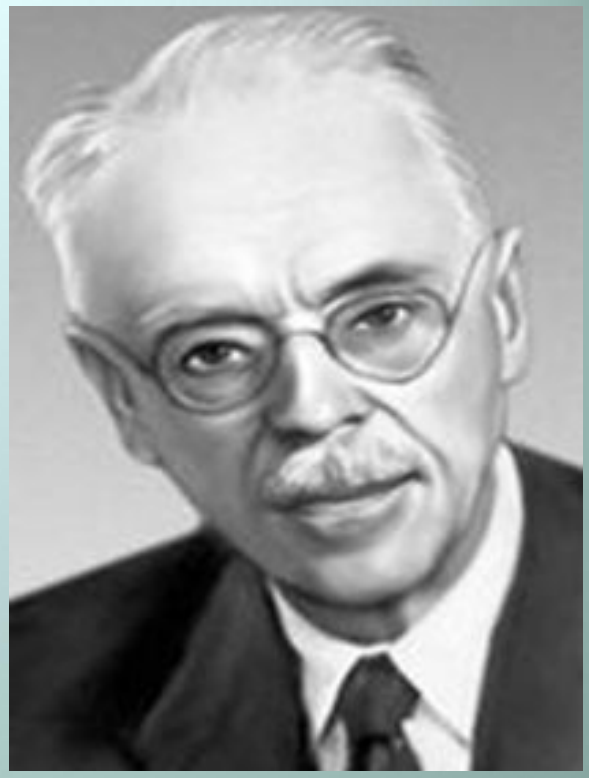
JATROGENIC DISEASES

An occasional thoughtless word from the physician may impair the mood of the patient, impair his sleep, appetite, and general condition and even may provoke disease.

KEEPING MEDICAL SECRETS

The patient's confidence with his doctor and other medical personnel is an important medical factor: the patient feels safe and believes that everything possible is being done to promote his recovery. This however does not hold for cases where keeping a secret may do harm to other people.

NB!



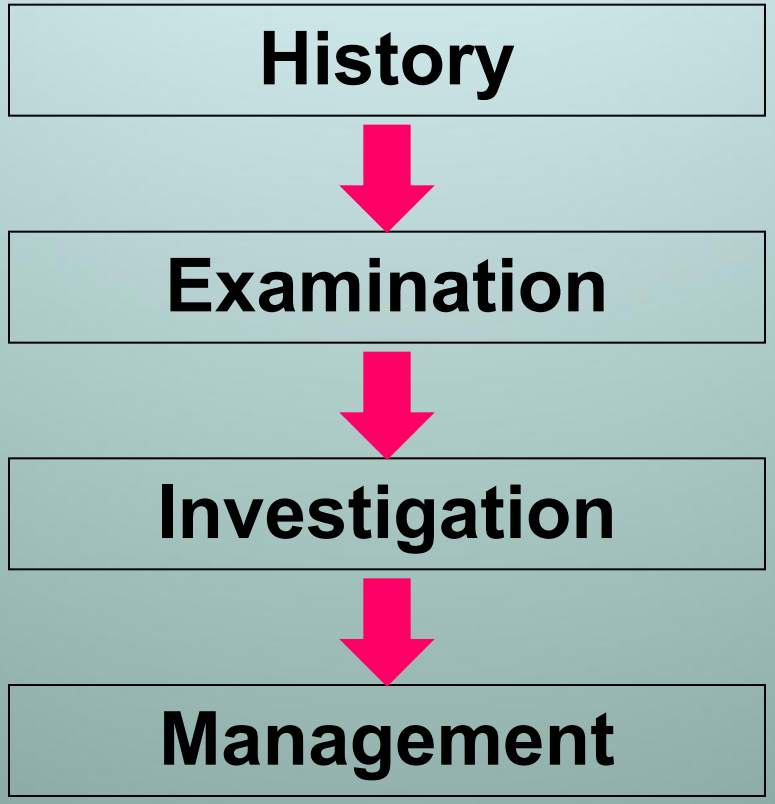
Paul White
1886-1973

- ***«…it is impossible to carry conviction in absence of symptoms and signs, if them specially not to find out and not search»***

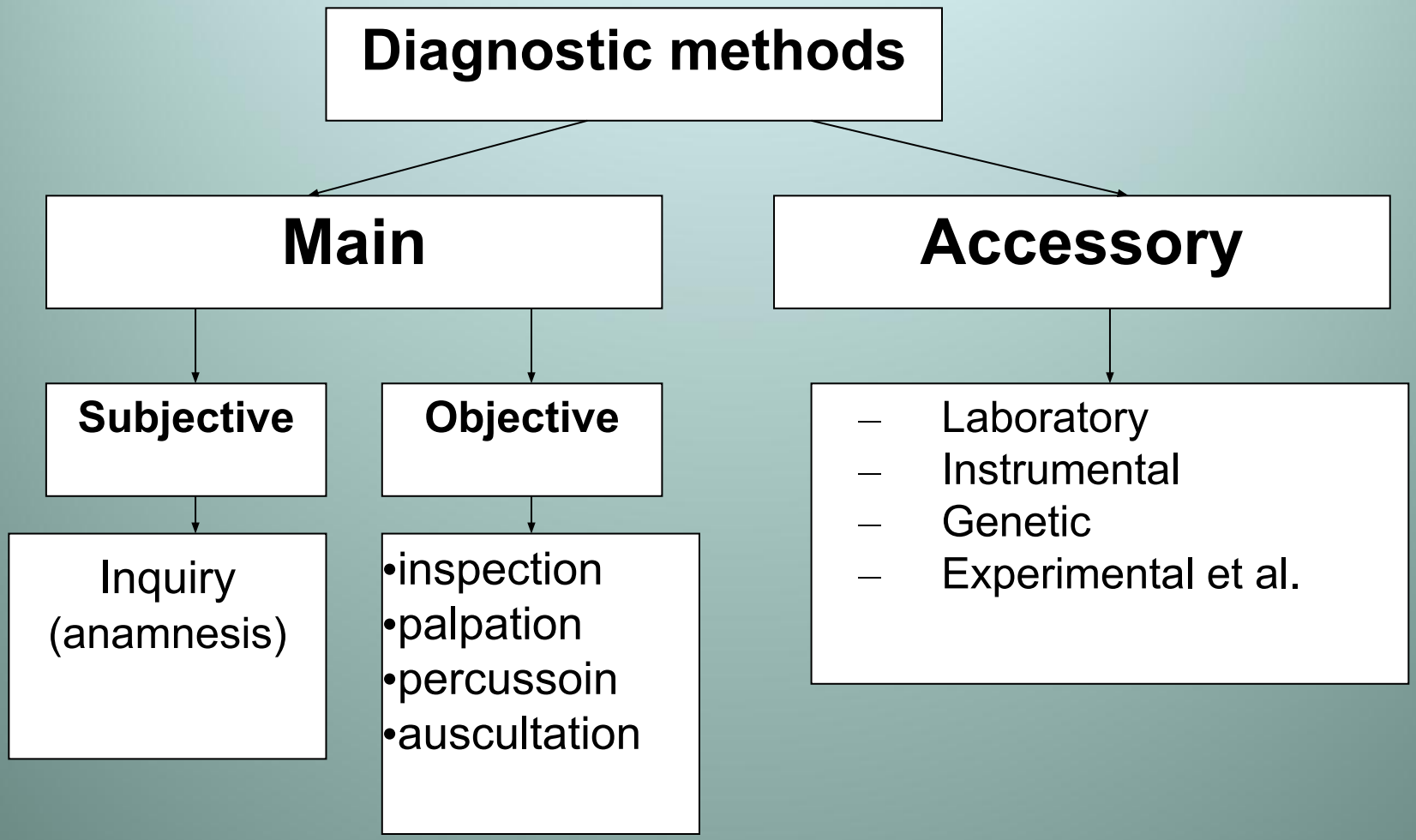
Case history

Is a medical document, which contains data about the progress of the disease - from early manifestations till the present moment the survey based on data of subjective and objective tests.

Steps in a clinical approach



The basic methods of patients' examination



The main structural parts of diagnostics:

- methods of research of the patient identification of the main signs of the disease, symptoms and syndromes of disease
- identify the causes and mechanisms of occurrence of symptoms and syndromes (semiology)
- logic diagnosis (essence of illness) and setting forth in the relevant nosologic terms

A **medical test** is any kind of medical procedure performed to aid in the detection or diagnosis of disease, or to guide its treatment

- A **screening test** is a simple test used to detect the presence of disease in individuals in a defined population (example - measuring the level of TTH in blood obtained from a newborn infant as part of newborn screening for congenital hypothyroidism).
- A **diagnostic test** disease is a procedure performed to confirm the presence of disease in an individual suspected of having the disease (example - measuring the blood sugarin a person suspected of having diabetes mellitus).
- A **monitoring test** may be performed to monitor the progress of, or response to medical treatment, of a disease (example - measurement of forced expiratory volume to assess response to treatment of asthma).
- A **prognostic test** may aid in determining the likely future course (prognosis) of a disease (example - biopsy of a removed tumor to determine the degree of malignancy).

The role of physical examination Some history

- **Hampton et al. (1975):**
  - stated that history-taking was responsible for 82.5% of all diagnoses
- **Sandler (1979):**
  - history-taking was the most important factor in both diagnosis and management in cardiovascular, neurological, respiratory, urinary and other miscellaneous problems, and was decisive in 56% of all diagnoses (according to 630 analyzed case reports)
- **Roshan and Rao (2000):**
  - history-taking was responsible for the diagnoses of 78.6% of all patients,
  - physical examination was responsible for another 8.2%
  - laboratory investigation a further 13.2% of all diagnoses.

Remember…

- A good history is very important for making a diagnosis.
- Examination and investigations may help to confirm or refute the diagnosis made from the history.
- The history will also tell you about the illness as well as the disease.
- The illness is the subjective component and describes the patient's experience of the disease.
- ***Try to follow the sequence history, examination, investigation when you see a patient. A common mistake is to rush into investigations before considering the history or examination.***

Inquiry (anamnesis)

Passport part (pars officialis)

↓

Patient's complaints (molestiae aegroti)

↓

History of the present disease (anamnesis morbi)

↓

Questioning about other organs and systems (anamnesis communis)

↓

Life history (anamnesis vitae)

Inquiry

- *Passport part (name, date of birth, age, address, occupation, way of admission)*
- *Patient's present complaints*
- *History of the present disease (anamnesis morbi)*
- *Past history (anamnesis vitae)*

Passport part
(pars officialis)

- **Patients' name**
- **Age**
- **Sex**
- **Residence, phone**
- **Work place, profession, position**
- **Time and type of admission**

Patient's complaints
(molestiae aegroti)

Types of complaints:

- **main complaints** (predominate in clinical state, cause of admission)
- **additional complaints** (elucidated only by additional questioning)
- **general complaints** (occure at many conditions: fever, weakness, insomnia, headache et al.)

Each complain can be detailed.

Present Complaints

Main complaints *(witch lead to hospital) should be specified:*

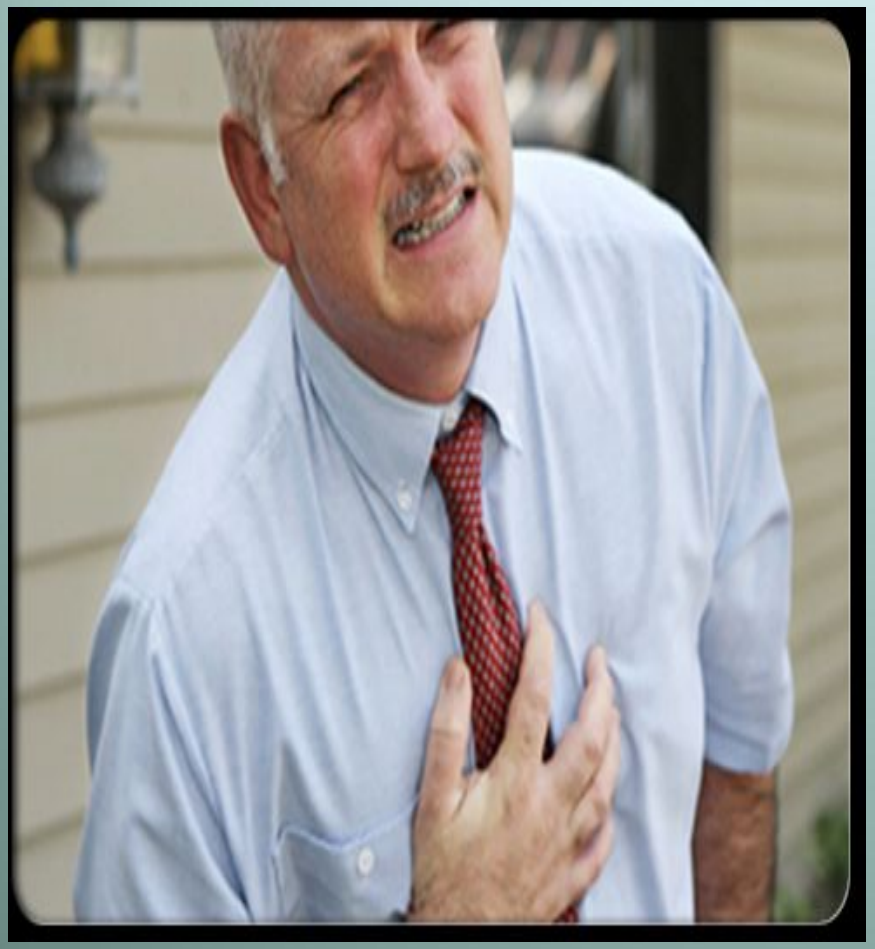
- *Location*
- *Intensity*
- *Character*
- *Course*
- *Duration*
- *Frequency*
- *Radiation*
- *Associated symptoms*
- *Cause of onset etc.*

and the ***second-rate complaints*** *(weakness, headache etc.)*

Specification of complain

- *Site*: **where, local/ diffuse, "Show me where it is worst".**
- *Onset*: **rapid/ gradual, pattern, worse/ better, what did when symptom began.**
- *Character:* **vertigo/ lightheaded, pain: sharp/ dull/ stab/ burn/ cramp/ crushing.**
- *Radiation* **(usually just if pain).**
- *Alleviating factors*,**"What do you do after it comes on?**
- *Time course*: **when last felt well, why came now.**
- *Exacerbating factors*, **"What are you doing when it comes on?".**
- *Severity*: **scale of 1-10.**
- *Associated symptoms*.
- *Impact of symptoms on life*: **"Does it interrupt life?".**

The pain – most common complain: specific characteristics



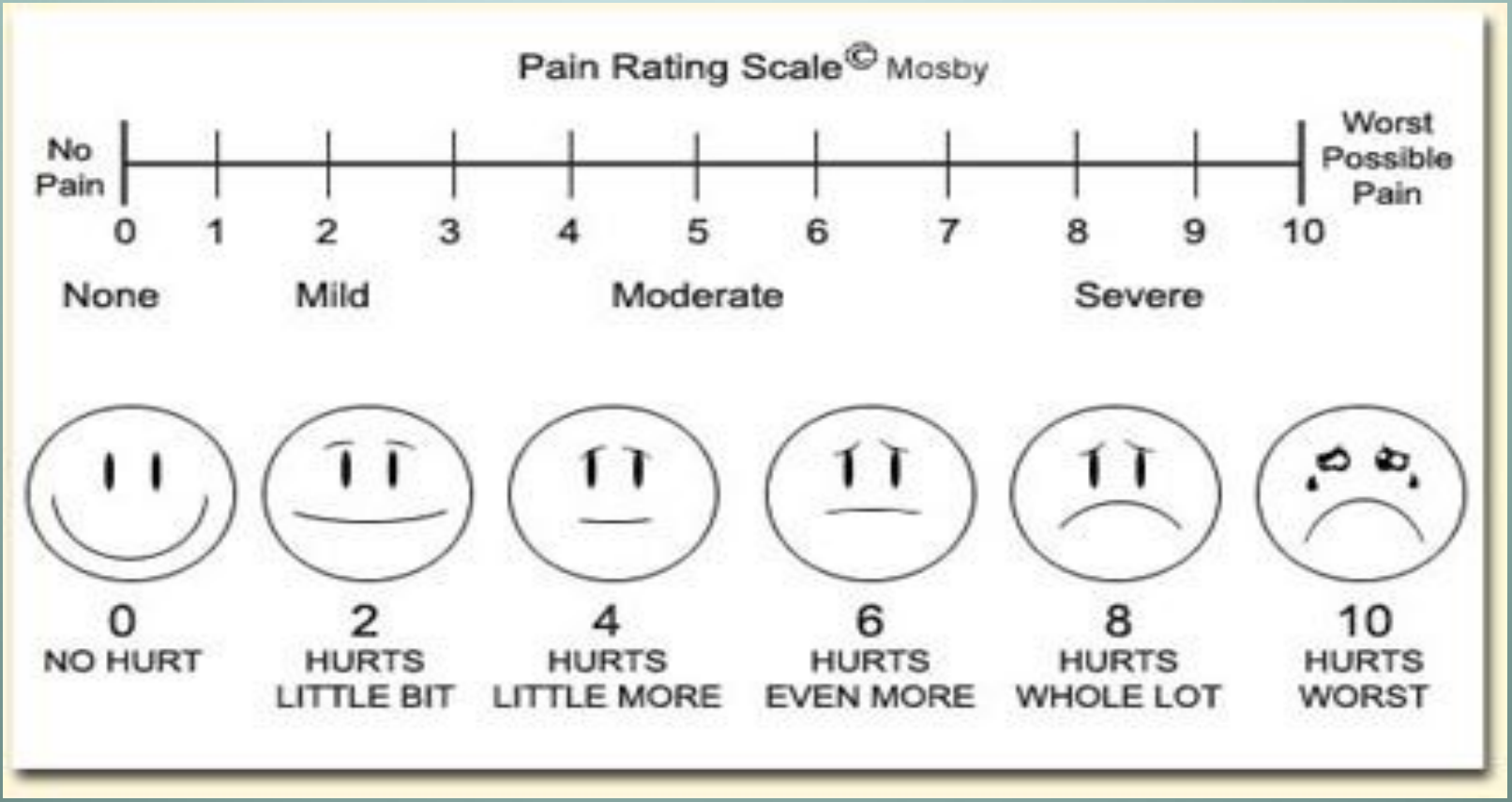
- **Exact site or location of pain**
- **Nature of pain (dull, sharp, etc)**
- **Onset of pain (sudden, gradual, etc)**
- **Severity of pain (can use a scale 1-10)**
- **Duration of pain (seconds, minutes, hours, or days) .**

The pain – most common complain: specific characteristics

- Progress, including frequency and timing of the pain (constant, intermittent, etc)
- Radiation of the pain
- Aggravating and relieving factors
- Previous occurrences
- Associated symptoms (nausea, vomiting, etc)
- The patient's notion of what is causing the pain

Another subjective method for pain evaluation

Pain scales are tools that can help health care providers diagnose or measure a patients pain's intensity.



Summarizing the complains

An attempt should be made to link the presenting complaint with the related systems review or inquiry.

- For instance, a patient presenting with **chest pain** should be asked questions covering the cardiovascular and respiratory systems such as cough, shortness of breath, palpitations, ankle swelling, etc.

Summarizing the complains

It is worthwhile to try and determine any risk factors for the probable diagnosis.

- For example, a patient presenting with **chest pain**, and suspected of having a myocardial infarction, should be asked questions about:
  - smoking,
  - hypertension,
  - diabetes,
  - family history, etc.

The aim of this is **to integrate your history**, make a correct diagnosis, and ensure that management takes into account all the available information.

Anamnesis morbi

data concerning onset and progresses of the present disease until the present

- *The time of disease onset* **(acute or gradual)**
- *The cause* **(if known)**
- *The first symptoms of and their character*
- *Previous examination and results* **(if any)**
- *The treatment and results* **(if any)**

History of the present disease (anamnesis morbi)

- When did the problem start (date and time)?
- Who noticed the problem (patient, relative, caregiver, health professional)?
- What initial action was taken by the patient (any self treatment)?
- When was medical help sought and why?
- What action was taken by the health professional?
- What has happened since then?
- What investigations have been undertaken and what are planned?
- What treatment has been given?
- What has the patient been told about their problem?

Questioning about other organs and systems

(you should beginning from system, whic are the main complaints)

- *Cardiovascular system* (chest pain, breathlessness, palpitation, intermissions, edema)
- *Nervous system* (work capacity, mood, memory, attention, sleep, headache, dizziness)
- *Respiratory system* (voice changes, pain in the chest during breathing, breathlessness, asthma, cough, expectoration of sputum and blood)
- *Digestive system* (appetite, thirst, swallowing, nausea, vomiting, epigastric pain, defecation)
- *Urinary system* (pain, urination, urine character)

Questioning about other organs and systems (anamnesis communis)

Getting started according the affected system

Conducted in such sequence:

Cardiovascular system

Respiratory system

Digestive system

The organs of the urinary tract

Nervous system

Musculoskeletal system

Questioning about other organs and systems (anamnesis communis)

Cardiovascular system

- Chest pain, pressure
- Shortness of breath, exertion required
- Lie flat or use pillows, how many pillows
- Awoke breathless at night
- Noticed heart racing, aware of heartbeat
- Ankle swelling
- Cold/ blue hands, feet

Questioning about other organs and systems (2)

Pulmonary system

- Cough: sputum, blood
- Shortness of breath, wheeze
- Snore loudly, apnea
- Fever, night sweats
- Recent chest X-ray
- Breast: lumps, bleeding, masses, discharge

Questioning about other organs and systems (3)

Digestive system

- Weight, appetite changes
- Abdominal pain or discomfort
- Bloating, distention
- Indigestion
- Nausea, vomiting: contents
- Bowel habits: change, number
- Incontinence, constipation/ diarrhea
- Stool: colour, blood/ black, consistency, mucous

Questioning about other organs and systems (4)

Nervous system

- Headaches
- Vision, hearing, speech troubles
- Dizziness, vertigo
- Faints, seizures, blackouts
- Weakness, numbness
- Sleep disturbances
- Ataxia, tremors
- Concentration, memory

Questioning about other organs and systems (5)

Genitourinary system

- Incontinence
- Frequency, dysuria, nocturia
- Genitourinary pain, discomfort
- Hesitancy, dribbling
- Changes to quantity, colour
- Blood in urine
- Genital rashes, lumps
- Sex life problems
- Pain, bleeding in periods

Questioning about other organs and systems (6)

Endocrine system

- Prefer hot or cold weather
- Sweating
- Fatigue
- Hand trembling
- Neck swelling
- Skin, hair, voice changes
- Thirst

Questioning about other organs and systems (7)

Rheumatoid

- Joints: pain, stiffness, swollen
- Variation in joint pain during day
- Fingers painful/ blue in cold
- Dry mouth, red eyes
- Skin rash
- Back, neck pain

Anamnesis Vitae

- *Biographical data*
- *Past diseases in childhood, adolescent and adult* **(tuberculosis, cardiovascular, nervous, psychiatric, endocrine diseases)**
- *Habits* **(smoking sigarets, drinking alcogol, narcotics contribute)**
- *Family history* **(pathological heredity)**
- *Social history* **(occupation and domestic arrangements – living conditions, nutrition)**
- *Allergological history*

Life history (anamnesis vitae)

Social, personal history

- **Birthplace, residence.**
- **Race and migration (if relevant).**
- **Present occupation [and what do they do there], level of education.**
  • Any others at workplace with same complaint.
- **Smoking: "Ever smoked, how many per day, for how long, type (cigarette, pipe, chew)".**
- **Alcohol: do you drink. If yes: type, how much, how often.**

Life history (anamnesis vitae)

Social, personal history (2)

- **Travel: where, how lived when there, immunization/ prophylactic status when went [if relevant].**
- **Marital status (and quality), health of spouse/ children**
- **Other household members, pets (if infections/ allergies), social support, whether patient can manage at home: "Who's with you there at home".**
- **Diet, physical activity.**

Life history (anamnesis vitae)

Past medical, surgical history

- **Past illnesses, operations.**
- **Childhood illness, obs/gyn.**
- **Tests and treatment prescribed for these.**
  - Drugs remaining relevant: corticosteroids, antihypertensive, chemotherapy, radiotherapy.
- **Checklist of diseases:**
  - **Jaundice**
  - **Tuberculosis**
  - **Hypertension**
  - **Rheumatic fever**
  - **Epilepsy**
  - **Asthma**
  - **Diabetes**
  - **Stroke**
- **Problems with the anesthetic in surgery.**

Life history (anamnesis vitae)

Family history

- The current complaint in parents/ siblings: health, cause of death, age of onset, age of death [heart disease, bowel cancer, breast cancer].
- Health of parents/ siblings/ children: "Are your parents still alive?" "How is the health of your..."
- Hereditary diseases suspected: do a family tree.

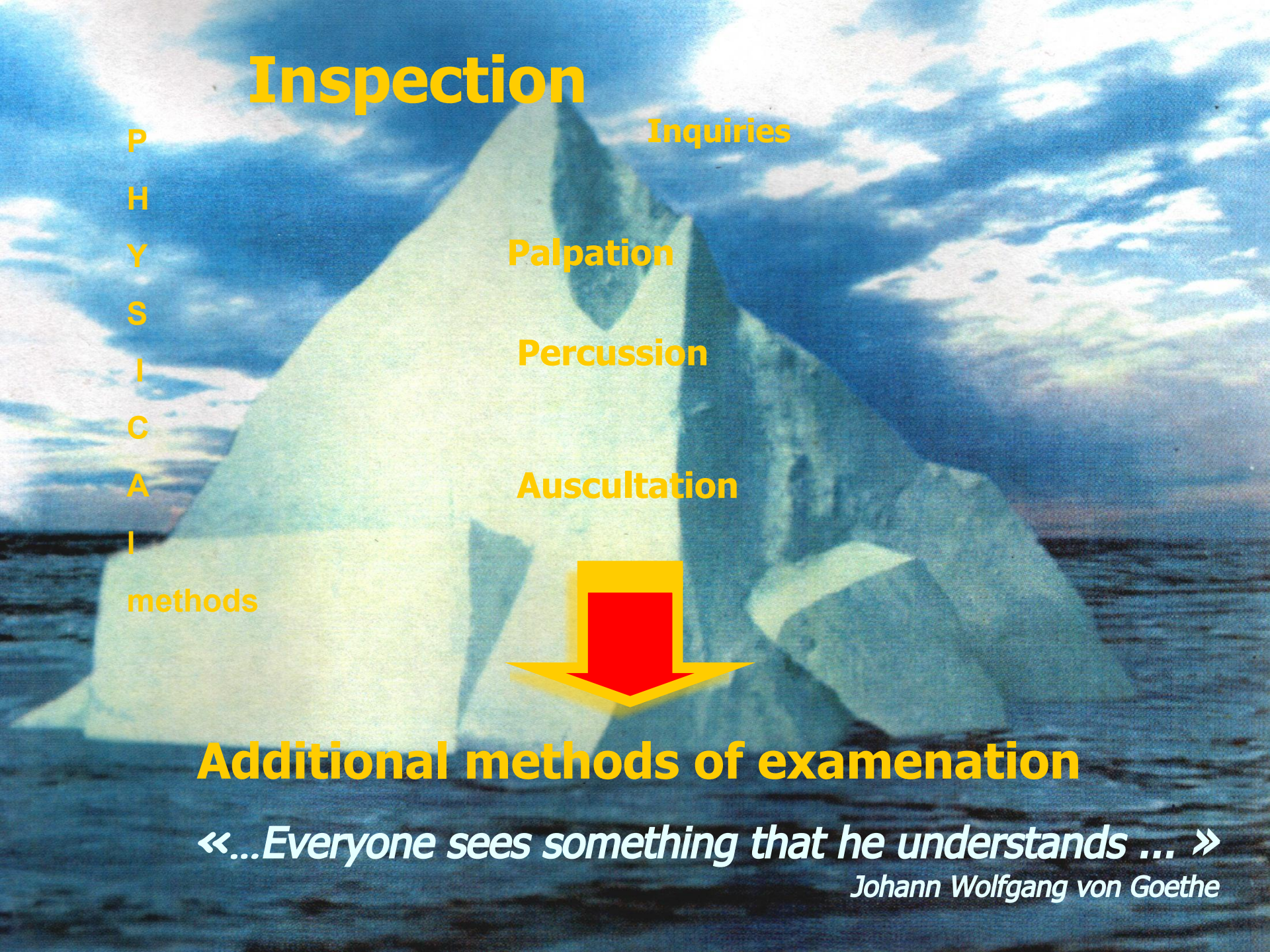
Life history (anamnesis vitae)

Allergologic history:

- Drug allergy (and what was reaction)
- Food allergy (type of food, time and character of reaction)
- Biological allergy (animal hair, wool, flowering, pollen)
- Chemical allergy (household chemical goods)
- Physical allergy (sunlight, cold) ect.

Evaluation of anamnestic data

- **Separate the main complaint(s)**
- **Evaluate the complaints interaction and combine these to syndromes**
- **What system(s) affected**
- **Type of disease course (chronic, acute, subacute)**
- **Possible cause(s) (by patients' mind)**



«…Everyone sees something that he understands … »

Johann Wolfgang von Goethe

William Osler, 1849-1919

- «Learn to **see**, learn to **hear**, learn to **feel**, learn to **smell**, and know that **by practice alone** can you become expert. Medicine is learned by the bedside and not in the classroom. Let not your conceptions of the manifestations of disease come from words heard in the lecture room or read from the book. **See, and then reason and compare and control. But see first!**»

William Osler, MD

Johns Hopkins Hosp. Bull., 1919

Science and charity. Pablo Picasso. 1897.
The Picasso Museum, Barcelona

Метсю, Габриэль - Больная и врач,

Objective examination-
information about status praesens

- **Examination methods** (main – systemic inquiry and physical examination and auxiliary - instrumental and laboratory methods)

Physical examination:

- inspection
- palpation
- percussoin
- auscultation

PHYSICAL EXAMINATION

- **Status present**
- **General status:** good, satisfactory, bad, severe agony.
- **Patient's posture:** active, passive, forced.
- **Consciousness:** clear, infringed, stupor, sopor, coma, hallucinations, delirium.
- **Patient's appearance:** corresponding to age (looking older or younger).
- **Body structure:** correct, irregular.
- **Constitution:** normosthenic, asthenic, hypersthenic.
- **Gait:** energetic (active), weakened.
- **Orthopedics:** straight, infringed, "proud".
- **Height/weight.**
- **Skin layers:** shade (body-colour: pale, red, cyanotic, grey, bronze-like, icterous, hyperpigmentation, depigmentation);

  desquamation (location, expressiveness: moderate, intensive); humidity (usual, decreased, raised); rashes (location, features of elements, their characters: roseola, petechias (petechiae), papules, vesiculas, erythema); hemorrhages (localization, expressiveness), "spider angiomata";

  scars (posttraumatic, postoperative: size, location), trophic changes (ulcers, bed-sores), external tumors (atheromas, angyomas: location, size), tenderness on palpation, connection to skin and surrounding tissues.

PHYSICAL EXAMINATION (2)

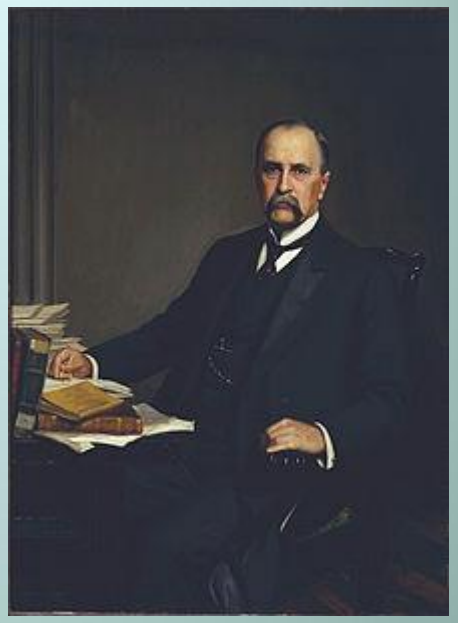
- **Subepidermal adipose tissue (subcutaneous fat tissue):** expressive local visions (moderate, insufficient, excessive).
- **Oedemas** (their location: shin, lower back, ascitus, anasarca), expressiveness.
- **Hair:** baldness, alopecia (localization, expressiveness), hair pigmentation disorder, hirsutism (location).
- **Mucous membrane** should be examined: conjunctiva, nasal and oral mucosa. Colour (pale- pink, pale, cyanotic, icterous). Aenanthemas, their features.
- **Nails:** shape, colour, breakage, longitudinal and transversal lines.

PHYSICAL EXAMINATION (3)

- **Examination of the body parts:**
- **Head:** shape, proportions, symmetry, correspondence to facial and cerebral parts.
- **Face:** symmetry, expression (usual, apathic, suffering, impressed, exhausted), shape (regular, sunken, swelled, oedematic, moon-like, acromegalic).
- **Hair-covering:** male/female type.
- **Eyes:** width of eye slit (moderate, wide, narrowed), eye shape (usual, exophtalmus, enophthalmus), squins, hypersecretion of tears, scleras (usual, icterous, hyperaemic, hemorrhages), pupils (shape, size, anisocoria, light response).
- **Nose:** expression of nasolabial folds, size of a nose, shape (usual, saddle-like).
- **Ears:** colour of skin (usual, cyanotic, red), nodes. **Neck:** shape (usual, short, long), carotid pulsations, jugular pulsation, dilated jugular veins.

- **Locomotor system.**
- **Complaints:** limb pains, joint pains, character of pain (according to weather changes, exertion).
- **Joints** difficulties in motion, immobility in the morning. Spine vertebral pains, irradiation.
- **Examination and palpation:** Joint swelling, redness, bone deformities, thickness and roughness on periosteum palpation, osteomalacia, tenderness on palpation and percussion, spine deformation (scoliosis, lordosis, kyphosis, kyphoscoliosis); hands and feet (normal, thickened, plate, fingers of "drumsticks" and nails of "clock-glasses" shapes).

Clinical medicine: scientific art…



William Osler
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