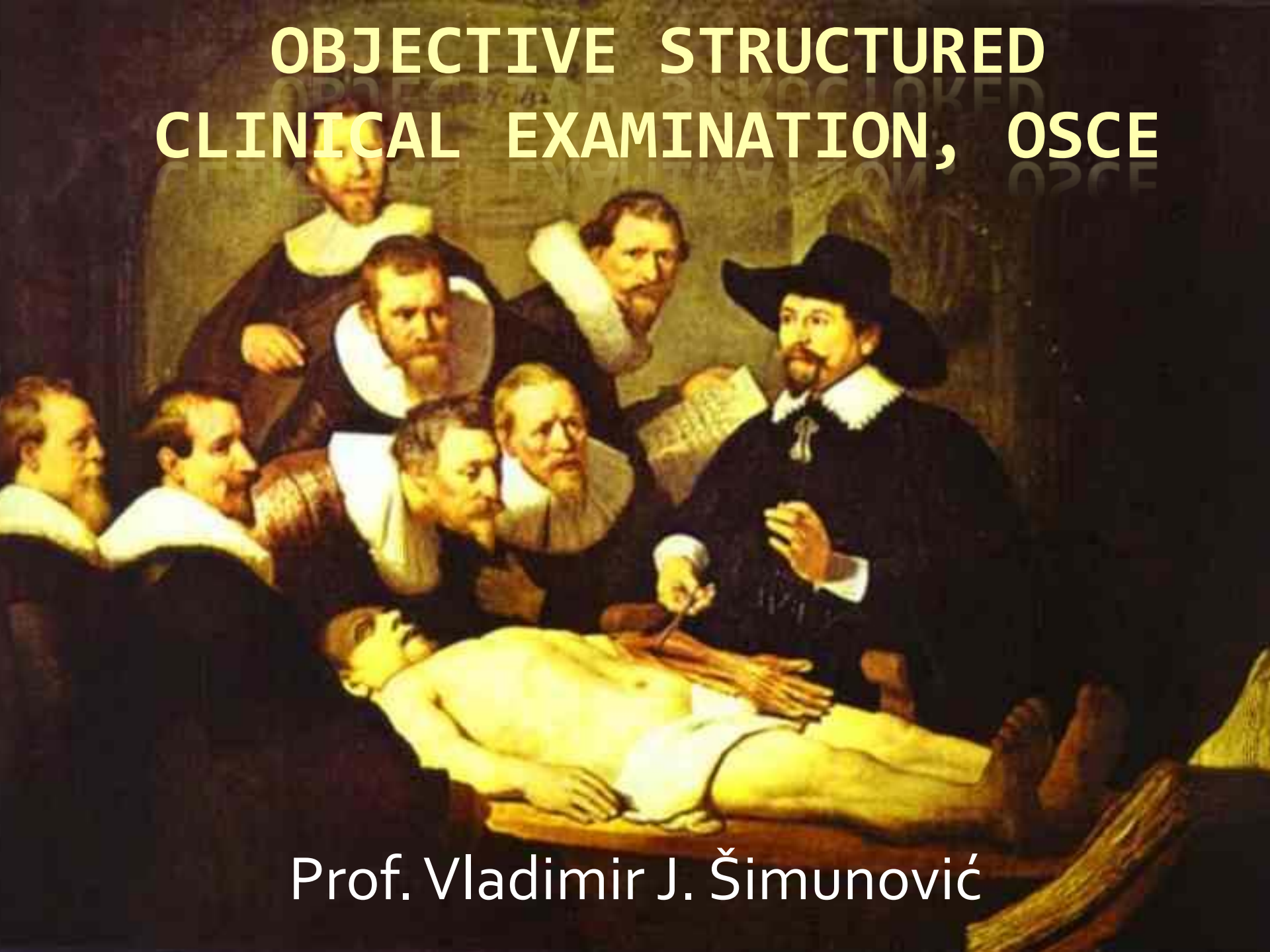
OBJECTIVE STRUCTURED CLINICAL EXAMINATION, OSCE



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Objective

To test clinical skill performance and to assess students' competence in

1. communication;
2. clinical examination;
3. execution of medical procedures;
4. execution of manipulation techniques; and
5. interpretation of results.

OSCE principal features

- a circuit of 10-12-15 stations
- short (usual is 5–10 minutes)
- each candidate is examined on a one-to-one basis
- station is real or simulated patients (actors) or
- alternatively, real or simulated clinical problem
- each station has a different examiner
- students rotate through the stations, completing all the stations on their circuit

OSCE vs. traditional examination

Advantage

- all candidates take the same stations
- the stations can be standardized
- fair peer comparison
- complex procedures can be assessed without endangering patients health.

Disadvantage

OSCE is more expensive

difficult to organize

require substantial resources

OSCE design

OSCE is designed to be:

1. **OBJECTIVE**

- all candidates are assessed using exactly the same stations
- the marking scheme is same
- assessment by large number of assessors
- not based on subjective impression of one examiner

OSCE design

OSCE is designed to be:

2. STRUCTURED

- detailed scripts are provided to give the same information to all candidates
- Instructions are carefully written
- the OSCE is carefully structured to include parts from all elements of the curriculum
- as well as a wide range of skills.

OSCE design

OSCE is designed to be:

3. **CLINICAL EXAMINATION**

- the OSCE is designed to test the applicable clinical and theoretical knowledge.
- where theoretical knowledge is required the questions are standardized
- the candidate can be asked questions that are on the mark sheet

OSCE marking

OSCE is made objective by having

a. a detailed mark scheme
b. standard set of questions
c. done by the examiner.

OSCE marking

OSCE is made objective by having

a. written stations use a standardized mark sheet
b. points are awarded for specific actions which are performed safely and accurately
c. By the end of each station, the candidate is rated as pass/borderline/fail, and
d. It is determined a minimum number of stations required to pass

Preparation for OSCE

- very different from preparing for an examination on theory
- In an OSCE, clinical skills are tested rather than pure theoretical knowledge

It is essential

a. to dissect the clinical procedure into its individual steps,
b. learn the steps,
c. earn to perform the steps in a sequence.

Standardized (simulated) patient with headache

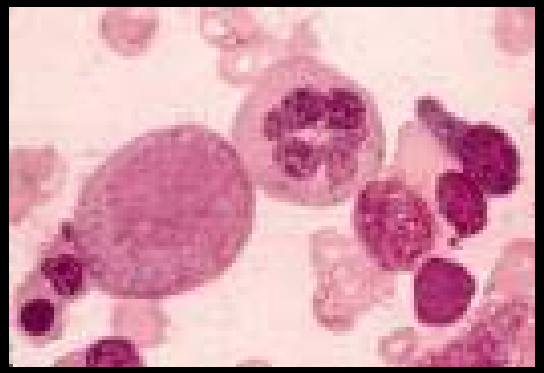
1. FIRST or WORST headache ever?
2. DIFFERENT from usual headaches?
3. Onset = when did it start?
   - gradual, sudden (thunder-clap)
4. Provocative
   - stress, food, menstrual cycle, rest
5. Quality
   - unilateral, bilateral, band-like?
   - does it spread?
   - throbbing, stabbing, dull, pressure

STANDARDIZED (SIMULATED) PATIENT WITH HEADACHE, CONT'

1. Radiation of pain
    1. where does it spread?
2. Severity
    1. Nausea/vomiting
    2. photo/phonophobia
    3. vision changes
    4. fever
    5. stiff neck
    6. confusion

Anaplastic anemia

Multiple choice, MCT



a. lymphoma, non-Hodgkin
b. megaloblastic anemia
c. multiple myeloma
d. anaplastic anemia

Short answer test, SAT

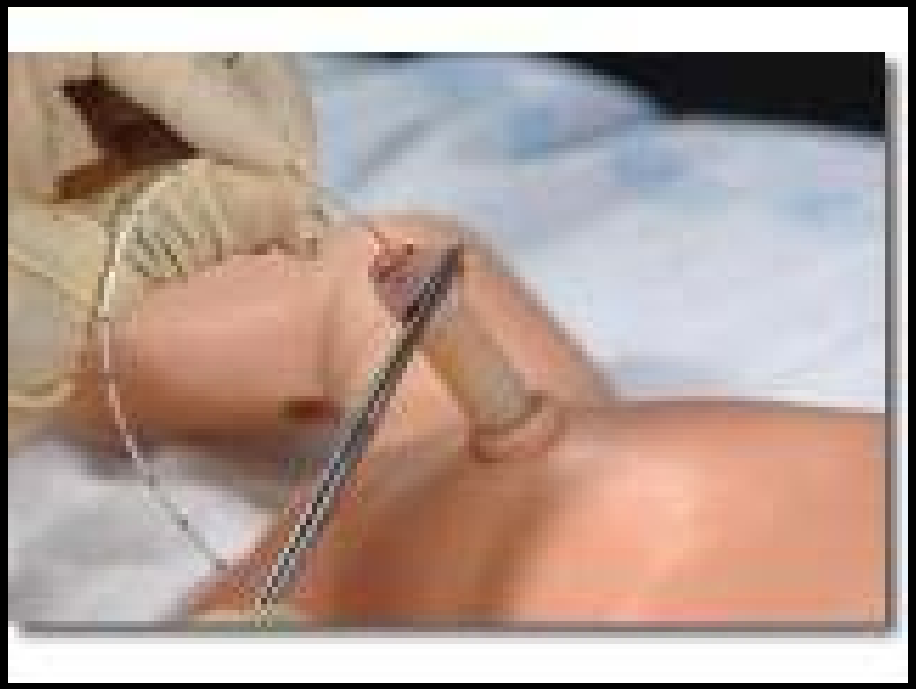
Slide represent the peripheral blood smear of ....

Mannequins

Airway Features

- Endotracheal Tube Inser
- Laryngeal Mask Airway Insertion
- Sellick Manoeuvre
- Positive-Pressure Ventilation
- Right Mainstem Intubation
- Suctioning
- Variable Lung Compliance
- Gastric Tube Insertio

Mannequins



Breathing Features

- Spontaneous breathing with variable rate
- Bilateral and unilateral chest rise
- CO_2 exhalation
- Normal and abnormal breath sounds
- Oxygen saturation

Mannequins

Vascular Access

a) **umbilical**

b) **intraosseal**

Circulation:

- **Heart Sounds**
- **Umbilical and Brachial Pulse**
- **Blood Pressure measured by auscultation**

Mannequins

Breathing Complications:

1. Pneumothorax
2. Unilateral chest movement
3. Mechanical ventilation
4. Unilateral breath sounds
5. Unilateral needle thoracentesis

Video clips

- Movement disorders
- Parkinson disease gait
- Epileptic fits, etc.

Defibrilation

Procedures

Wound suture and dressing

Joint and bone immobilization

Catetherization

Venepuncture and cannulation

Drainage maintenance

Aspiration

Enema, etc.

Apparatus and intruments

Monitors

Defibrilators

Ventilators

Subaqual drainage

Active abdominal drains

Oxy- and capnometers

Vascular pumps

Infusion systems, etc.

Expected result of OSCE:
good care for patients