Lab SIM B6

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Part 1: ABB, physiological consideration

Aim: in clinical cases consider the leading sign, the causal chain cause – consequence, eve. compensatory reaction.

Try to recommend a help in principles. (examples: oxygenation, hydration, HR increasing/decreasing, peripheral resistance increasing/decreasing

A. Revision:

Task:

You are medical students of the 2nd year, you are on intensive care unit supervised by experienced doctor. You are expected:

Examine the patient

Assess severity, understand why.

Think: What is wrong and why?

Plan what to do and do.

Reassess. (Has my intervention helped?)

Use SBAR procedure to transfer the information to your colleague.

Challenge I, II

Examples of physiological consideration:

During consideration what is wrong, use physiology tool.

What are the conditions of an appropriate:

BP (volume, C.O., peripheral resistance)

DO2 (ventilation, diffusion, lung perfusion, transport)

etCO2 (production, circulation, diffusion, ventilation)

GFR (pre-renal, renal, post-renal)

Consciousness (determinants will come out form today lab)

ABB (acids production and elimination)

Recommendation: try to prepare your own flowchart for each item and use it.

SBAR conclusion

| II . |
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Consciousness evaluation

Vital function assessment, consideration

Aims:

- Conditions of Consciousness
- Consciousness assessment
- Examination assessment, looking for causal chain
- principles of appropriate reaction to actual status of organism
- physical examination practice

Part 2: Consciousness

Definition

Self cognition, cognition of surroundings, ability to react appropriately Quantity(vigility)/quality (content, the person is orientated in person, place and time, is not confused)

• Pub Med,(MeSH Unique ID: D003243)

PRINCIPLES

| | synonyms | assessment | CNS structure involved |
|----------|--|---------------------------------|------------------------|
| Quantity | Vigility, wakefulness, Arousal, alertness | More or less awake, AVPU, GCS | ARAS |
| Quality | Awareness (of self and environment) | Content, orientated, disorient. | Cortex |

Consciousness conditions could be expressed in five items. Try to write them down:

| condition | Description (details) |
|-----------|-----------------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

- Consciousness evaluation systems:
 - o **AVPU** (Alert/Voice/Pain/Unresponsive).
 - o GCS (Glasgow Coma Scale):
 - : GCS = E+V+M
 - E: (Are the eyes open?) 4 points max
 - V: (What is the best verbal response?) 5 points max
 - M: (What is the best motor response?) 6 points max
 - GCS: an attempt to quantify the level of consciousness the purpose:

- Orientation in severity of patients state
- Looking for a tool for a decision making: for example.: When I should secure the airway..... (because of muscle hypotonic and absence of airway protection reflexes)
- Following development of status in time (evaluation in digital form 3-15, can be transferred through medical documentation from one doctor to the other)

Be ware: the value of GCS doesn't necessarily correspond to patients prognosis (example: really tired or drunk person with GCS 3 could have better prognosis than confused person with GCS 14)

AVPU Scale



Glasgow Coma Scale (GCS)

| points | E | V | M |
|--------|-----------|----------|-------------------------------|
| | Eyes open | Verbal | Motor response (to pain |
| | | | stim.) |
| 6 | - | - | Spontaneous motor activity |
| 5 | - | oriented | Pain localization |
| 4 | Spont. | confused | Withdrawal response on pain |
| 3 | On | words | Non-specific flection on pain |
| | demand | | |
| 2 | On pain | sounds | Extension on pain |
| 1 | No | no | No |

Accomplishment:

Similar to AVPU system,

very simple

Could you her me?

Could you open your eyes?

Could you squeeze my hands?

Pain stimulus: observing the response of: eyes (open/not), verbal (words/sounds/no), motor (see above) If the person is awake, questions on person identity, time and place should be answered

Number of simulations on a volunteer will follow. The task for examiner will be: approach your college, examine him/her, evaluate his status, try to find our what could be the cause of his/her disorder, find out in principles, if you could help with a basic equipment you have in a medical bag (you will be provided with)

Equipment:

BSM (patients monitor)

Medical bag: stethoscope, ambu-bag, glukometr, NaCl saline, Ringer saline, glucose solutions of different concentration: G5%, G10%, G40%

Simulation conclusion in SBAR structure:

Questions:

- How severe unconsciousness is and why? What could bet he cause of unconsciousness in principles?
- Explain airway security and consciousness disorder. What could be a problem and why?
- Why the evaluation of photoreaction is important? Is it more important in person with GCS 3 or 15 and why?

- Chat is the most convenient position of unconscious person and why?
- Is the severity of unconsciousness that resolved spontaneously of the same importance as lasting unconsciousness? Why?
- Does GCS 14 necessarily indicate less severe case than GCS 3? Why, discuss examples with the teacher.
- If you have an unconscious person, chat would you examine first? GCS or breathing?