Physiological Adaptation

Regulatory Exam, Practical Nurse (REx-PN)

6 to 12% of the exam · 19 activity statements · 2027 REx-PN Test Plan

Physiological Adaptation is the care of clients whose bodies are coping with an acute or chronic illness: understanding what the disease does, spotting complications early, caring for wounds, drains, ostomies, airways and pacemakers, managing fluid, electrolyte, oxygen and temperature problems, helping with invasive procedures and responding in an emergency. REx-PN items test whether the practical nurse links a finding to its cause, acts first when a life is at risk (CPR, the AED, opening the airway), does the PN's procedures safely and reports to the RN or primary health care provider when the client is unstable or needs a new order.

You should be able to: After this guide you should be able to link a client's findings to the condition, act first in an emergency, carry out the PN's wound, drain, ostomy, airway and device care safely, and report what needs the RN or primary health care provider.

Every activity statement: the key point and the trap

1. Understand the disease process behind acute and chronic conditions

Link each sign to its cause: crackles and edema in heart failure come from fluid backing up behind a weak ventricle; ascites in cirrhosis from portal hypertension and low albumin.

Trap: Explaining a sign by the wrong mechanism and so watching the wrong thing.

2. Spot signs of complications and act on them

Know the complication each condition carries: deep vein thrombosis and pulmonary embolism after surgery or immobility, hypoglycemia with insulin, bleeding with anticoagulants, increased intracranial pressure after head injury.

Trap: Leaving an unstable client to look up an order or call from the desk.

3. Explain a short or long term illness to the client

Reinforce the teaching the RN or primary health care provider began about the condition: what it is, the medications, the diet and activity, and the warning signs.

Trap: Reinforcing a fact without checking the client can use it, such as handing over a diet sheet without teach-back.

4. Care for wounds and change dressings

Clean from the cleanest area to the least clean, using a new swab each stroke, with the solution ordered (usually normal saline).

Trap: Cleaning a wound from the outside edge inward, which carries bacteria into the wound.

5. Watch and look after drainage devices, such as wound drains, chest tubes or wound vacs

Closed-suction drains (bulb drains) work only when compressed; empty, record and recompress them as ordered.

Trap: Clamping a chest tube to stop bubbling, which can cause a tension pneumothorax.

6. Carry out emergency care, such as CPR, breathing support or defibrillation

An unresponsive client who is not breathing normally (gasping counts as not breathing): call for help and an AED and start compressions at once.

Trap: Leaving the client to call for help, or checking for a pulse for longer than 10 seconds before starting compressions.

7. Care for a client whose breathing or oxygen levels are impaired

Early signs of hypoxia are restlessness, anxiety and a fast heart rate and breathing; cyanosis is late.

Trap: Turning the oxygen up for a client with carbon dioxide retention whose saturation is already above the target.

8. Care for a client with fluid or electrolyte imbalance

Fluid volume deficit: thirst, dry mucous membranes, low urine output, fast weak pulse, orthostatic drop. Excess: edema, crackles, weight gain, bounding pulse.

Trap: Treating a weight gain of 2 kg overnight as fat rather than fluid.

9. Keep the client's body temperature in a healthy range

Fever: give the antipyretic ordered, offer fluids, use light covers and a cool room; avoid shivering, which raises heat.

Trap: Applying ice packs to bring down a fever in a client who is already shivering.

10. Care for ostomies and teach about them

A healthy stoma is moist and pink to red; a pale, dusky, purple or black stoma is reported at once.

Trap: Cutting the barrier opening much larger than the stoma, which leaves skin exposed to output.

11. Suction the mouth, airway or nasopharynx

Suction only when needed (audible secretions, noisy breathing, falling saturation), not on a fixed schedule.

Trap: Applying suction while inserting the catheter, or suctioning for longer than 15 seconds.

12. Care for someone who has a permanent pacemaker

Check the pulse for a full minute; a rate below the pacemaker's set rate may mean the device is failing.

Trap: Encouraging full range of motion of the arm on the pacemaker side the day after insertion.

13. Help with invasive procedures, such as central line insertion

Before an invasive procedure, confirm the consent, allergies and identification, gather the supplies and position the client as the primary health care provider directs.

Trap: Positioning the client flat on the back, which makes the fluid hard to reach.

14. Care for a client after surgery

Priorities after surgery follow airway, breathing and circulation: saturation, respiratory rate, blood pressure, heart rate and bleeding at the dressing.

Trap: Removing a soaked surgical dressing to look, instead of reinforcing it and reporting.

15. Care for a client with problems in blood flow, perfusion or clotting

Hypovolemic shock: fast weak pulse, falling blood pressure, cool clammy skin, restlessness and low urine output.

Trap: Elevating the legs of a client with arterial insufficiency, which reduces blood flow to the feet.

16. Judge whether the treatment plan is working for a short or long term illness

Evaluate against the expected outcome in the plan: the measure that shows the treatment works (weight, lung sounds, glucose, pain score, wound size).

Trap: Judging the plan by one reading, such as one glucose value, instead of the trend.

17. Remove wound drains

Remove a drain only with an order, and explain that the client may feel a pulling sensation.

Trap: Pulling a drain out while the bulb still holds suction.

18. Take out sutures or staples

Remove sutures or staples only with an order, and look at the wound first: a wound that is not well joined is reported before removal.

Trap: Removing all staples first and only then checking whether the wound holds.

19. Recognize basic abnormal heart rhythms on a strip

Normal sinus rhythm: regular, 60 to 100 a minute, a P wave before every QRS.

Trap: Treating a monitor pattern without checking the client first; a loose lead can look like ventricular fibrillation.

Key terms

Pathophysiology: How a disease changes normal body function, which explains its signs.

Evisceration: Organs pushing out through an opened surgical wound; an emergency.

Tidaling: Fluctuation of the water in a chest drainage water seal chamber with breathing; expected.

Hypoxia: Too little oxygen in the tissues; early signs are restlessness and a fast heart rate.

Fluid volume deficit: Too little fluid in the body: thirst, low urine output, fast weak pulse, weight loss.

Stoma: An opening on the body surface from a bowel, urinary or airway diversion.

Pacemaker set rate: The lowest heart rate the device allows; a pulse below it may mean failure.

AED: Automated external defibrillator: it reads the rhythm and tells the rescuer when to shock.

Ventricular fibrillation: A chaotic rhythm with no effective heartbeat; the client has no pulse.

Hypovolemic shock: Organs underperfused because of blood or fluid loss.

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