Unit 9
EZ-PAP Therapy

GOAL

On completion of this unit, the student should have an understanding of operation and proper use of equipment to perform EZ-PAP therapy.

COMPETENCIES

1. Identify the components of the EZ-PAP device.
2. Explain the function and mechanics of the EZ-PAP device.
3. Assemble the EZ-PAP device for use.
4. Measure expiratory pressures at various gas liter flows.
5. Complete appropriate procedures in the clinical simulation lab.

EQUIPMENT

1. EZ-PAP device
2. Mouthpiece
3. Pressure gauge with tubing
4. Nose clips, normal saline
5. EZ-PAP stand with high pressure gas hose

EXERCISE A – EZ-PAP COMPONENTS

1. Identify the following components on an EZ-PAP set-up and label Fig. 1.
   a. small volume nebulizer
d. pressure monitor port
   b. mouthpiece
e. compressed gas inlet port
   c. ambient air inlet

![Fig. 1](image-url)
EXERCISE B - EFFECT OF GAS FLOW ON EXPIRATORY PRESSURE

1. Connect 1 end of tubing to a flowmeter that is connected to a 50 psi gas outlet.
2. Connect the patient end of the tubing from the flowmeter to EZ-PAP’s gas inlet port.
3. Connect the device’s pressure port to a pressure gauge with tubing.
4. Attach the mouthpiece to the rounded end of the device. Serrated end is to be exposed to ambient air at all times (do not occlude).
5. Add 3 ml of normal saline to the small volume nebulizer c.
6. Connect the tubing from the SVN to the SVN nipple on the EZ-PAP stand.
7. Connect the tubing from the compressed gas inlet port to the flowmeter on the EZ-PAP stand.
8. Set the flow on the flowmeter at 5 L/min.
9. Turn on the flow to the SVN with the toggle switch.
10. Instruct your lab partner to relax while breathing on the device while you note the pressure on the gauge. Record the pressure in the table below.
11. Set the flowmeter at 7, 10, and 12 L/min, then record the expiratory pressure level while your partner is breathing on the EZ-PAP device.

<table>
<thead>
<tr>
<th>FLOWMETER SETTING (L/min)</th>
<th>EXPIRATORY PRESSURE (cmH₂O)</th>
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<tbody>
<tr>
<td>5</td>
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<td>7</td>
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EXERCISE C – USE OF EZ-PAP THERAPY

1. With your lab partner, demonstrate proper techniques for administering EZ-PAP therapy.
2. Complete the EZ-PAP procedure in the clinical simulation lab.
WORKSHEET

1. What are the indications for EZ-PAP therapy?

2. How can the effectiveness of EZ-PAP therapy be determined?

3. During EZ-PAP therapy, a patient suddenly complains of sharp, left-sided chest pain. She becomes dyspneic and cyanotic. How would you assess this patient’s condition, and what actions should be taken?

4. A patient is not able to keep his lips sealed throughout the respiratory cycle during an EZ-PAP treatment. What can be done to facilitate therapy?

5. If a patient complains of dizziness or light-headedness during therapy, what is the most likely cause?

6. Describe the principle of operation of the EZ-PAP device.