

MODULE OF SKILL LABORATORY PRACTICE

BLOCK : DISASTER RELIEVE MEDICINE
TOPIC : SKILL AIRWAY MANAGEMENT

I. GENERAL OBJECTIVE

After finishing skill practice of airway management, the student will be able to recognizing the airway problem and install the endotracheal tube correctively

II. SPECIFIC OBJECTIVES

At the end of skill practices, the student will be able to:

- a. perform safety first
- b. perform recognizing the airway problem
- c. perform endotracheal tube (OPA)
- d. perform evaluation the installation of endotracheal tube (OPA)

III. SYLLABUS DESCRIPTION

Sub Module Objective

After finishing skill practice, student will be able to perform the steps of airway management correctly.

Expected Competencies

- a. Students perform safety first
- b. Students perform positioning the patient
- c. Students perform endotracheal tube (OPA)
- d. Students perform evaluation the installation of endotracheal tube (OPA)

Methods

- a. Presentation
- b. Demonstration
- c. Coaching
- d. Self practices

Laboratory Facilities

- a. Skills Laboratory
- b. Clinical Instructors
- c. Student Learning guide
- d. Instructor guide
- e. References
- f. Equipment

Venue

Training room (Skills Laboratory)

Evaluation

- a. Skill demonstration
- b. Point nodal evaluation
- c. OSCE

IV. Equipment arrangement

All equipment required for this topic include :

- a. Multimedia equipment
- b. Manequin

Tools:

A. Laryngoscope

- a. Consists of: Blade and Handle.
- b. Choose the appropriate blade size. Adult: no 3 or 4, Child: no 2, Baby: no 1
- c. Attach the blade to the handle, Check the lamp should be brightly lit.

B. Endotracheal Tube (ETT)

- a. Choose an appropriate size: (ID: Internal Diameter)
- b. Adult: ID 6.5, 7 or 7.5 Or \pm the patient's left pinkie
- c. Child: ID = 4 + (Age: 4)
- d. Infant: Premature: ID 2.5
- e. Aterm: 3.0 - 3.5

Always prepare one size below and above. Select ET High Volume Low Pressure (white ETT / fortex). When wearing re-useable, check the cuff and patent ET hole

C. Smit 20 cc.

D. Stylet (if necessary).

E. Sterile handsgloves.

F. KY jelly.

G. Forcep Magill (if necessary).

H. AMBU Bag with reservoir bag connected with oxygen source.

I. Plaster for ETT fixation.

J. Oropharngal Airway.

K. Tool suction with suction catheter

L. Stetoscope.

2. Emergency Drugs

- Sulfas Atropine (SA) in a syringe
- Adrenaline in a syringe.

V. LEARNING GUIDE

No.	Procedures	1	2	3
1	Say Basmalah			
2	Informed consent: greetings, introduces yourself, explains actions to be taken, asks for consent (to the family if the patient is unconscious)			
3	Using personal protective equipment include; caps, masks, apron, gloves, extras (if any): google, waterproof shoes			
4	Recognizing the airway problem (Look, Listen, Feel) with possible C-Spine injury. If there is a suspect C-Spine Injury, then the management of the basic and advanced airway is done with C-Spine protection which includes manual in line stabilization or cervical collar installation.			
5	Open the airway (Head tilt, chin lift, jaw trust) → if fails use basic airway aids (OPA) note indications and contraindications			
6	Pulse Oxymetry (SpO ₂) is applied when present then Ventilate positive pressure and oxygenation			
7	Position the patient: 'sniffing the morning air position', Neck slightly flexed, head extension. One pillow is placed under the head.			
8	Remove the OPA. The left hand holds the laryngoscope. Enter gently on the right side of the mouth above the tongue, Rid your tongue to the left looking for epiglottis. Place the end of the blade in the valecula.			
9	With the elevation of the laryngoscope, avoid leveraging the upper teeth. This will lift the epiglottis so that plica vocalis is visible (the color is pale).			
10	If not visible, ask assistant help to do BURP maneuver (Back, Up, Right Pressure) on cricoid cartilage until visible plika vocalist			
11	Enter the ETT through the right side of the mouth, guide the tip into the trachea until the ETT cuff passes through the vocalist plika (23 cm deep in man and 21 cm in women)			
12	Enter the ETT, guide the tip into the trachea until the ETT cuff passes through the plika vocalist.			
13	Connect ET pipes with ventilation devices such as bag-valve mask connected with oxygen (flow 10-12 L / min).			
14	Make the ETT cuff expand sufficiently (until there is no air leak) with a 20 cc air-filled syringe			
15	Evaluate the installation by listening through a stethoscope of the two expanding lungs, if only the sound of one of the lungs means entering one bronchus, bend the cuff & pull the ET, repeat the evaluation (if it sounds the same on both lungs, it is correct, the cuff expands). If the chest is not visible expands and			

	auscultation sounds gurgling in the epigastrium means esophageal intubation then deflates cuff & pull ET, repeat ETT installation.			
16	Attach the OPA with the notch facing up first, then rotate 180 degrees touching the pallatum molle			
17	Once sure if ET is in the trachea & breath sounds sounds the same in both lungs then ETT fixation with plaster			
18	Say Hamdalah			

VI. CRITERIA OF PERSONAL PERFORMANCE EVALUATION

SCALE	PERFORMANCE ACHIEVEMENT	COMMENT
1	If students are doing the task that only fill less than 35% of whole items for each step precisely	LOW
2	If student are doing the task that only fill 35% - 60% from whole items for each step precisely	MILD
3	If student are doing the task that only fill 60% - 78% from whole items for each step precisely	MODERATE
4	If student are doing the task that fill at least 80% from whole items for each step precisely	EXCELLENT

VII. Reference

1. Wilson WC, Grande CM, Heyt DB. Trauma Emergency Resuscitation Perioperative Anesthesia Surgical Management Volume 1. Informa Health care, New York 2007.
2. Rushman GB, Davies NJH, Cashman JN. Lee Synopsis of Anesthesia 12 th edition. Butterworth Heineman, Oxford, 2000
3. Prasenhadi. Manajemen Jalan Napas; Pulmonologi Intervensi dan Gawat Darurat Napas. FK UI, Jakarta, 2010.
4. Student Course Manual, Advance Trauma Life Support, Edisi 8. American College Surgeon, 1997.
5. Buku Panduan Kursus Bantuan Hidup Jantung Lanjut edisi 2011, PERKI 2011
6. ABC of Practical Procedures 1st edition, Blackwell Publishing, 2010.