

A vibrant, abstract background featuring a blue and purple nebula or galaxy. A horizontal line, colored in a dark blue-purple hue, spans across the upper portion of the image. The text is centered and rendered in a bold, yellow font with a subtle drop shadow.

Airway Management

AIRWAY MANAGEMENT

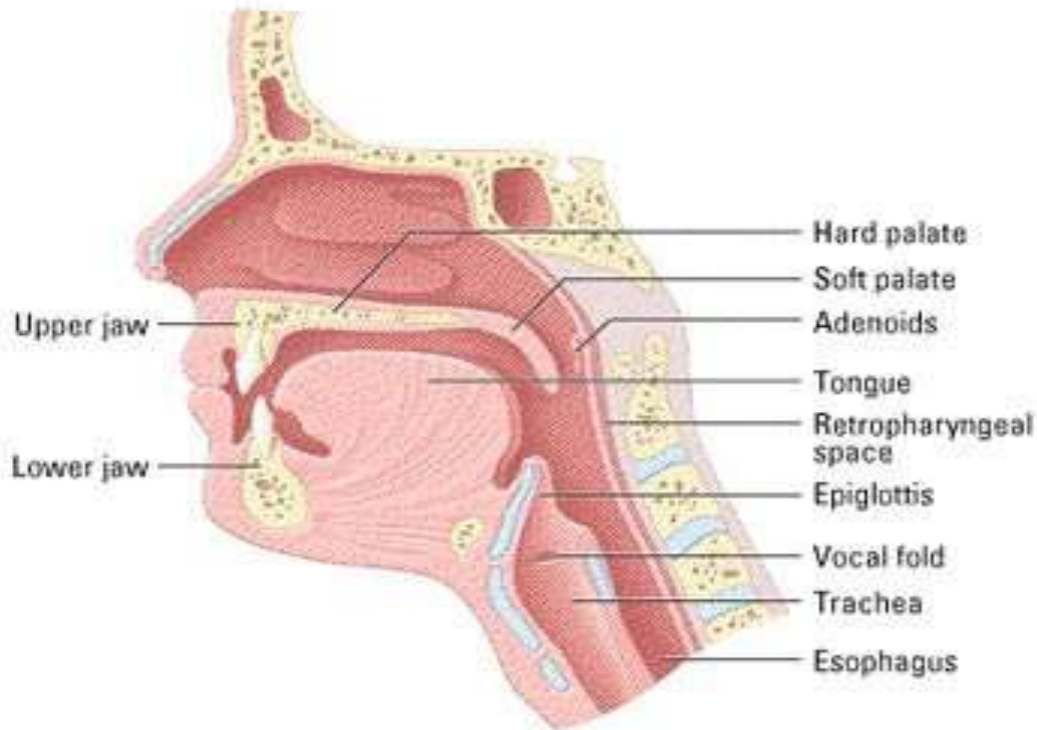
- AIRWAYS ARE THE MOST **IMPORTANT**
 - WITHOUT OXYGEN THE BRAIN CAN BE DAMAGED IN 4-6 MIN.
 - IN MOST CASES, MAKES ALL OTHER INJURIES SECONDARY

MASSIVE ARTERIAL BLEEDING IS THE EXCEPTION

ANATOMY



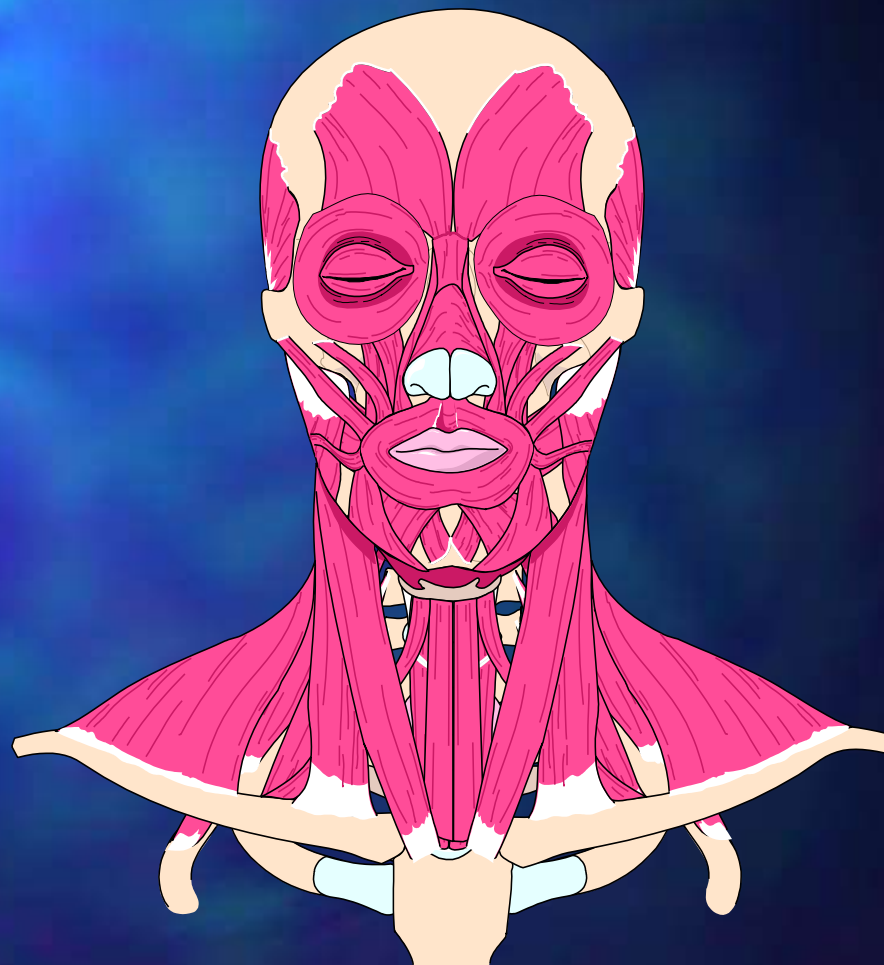
Throat
(side view)



AIRWAY & C - SPINE CONTROL

■ NECK EXAMINATION

- Wounds
- Distended neck veins
- Tracheal position
- Surgical emphysema
- Crepitus over larynx
- Hoarse voice

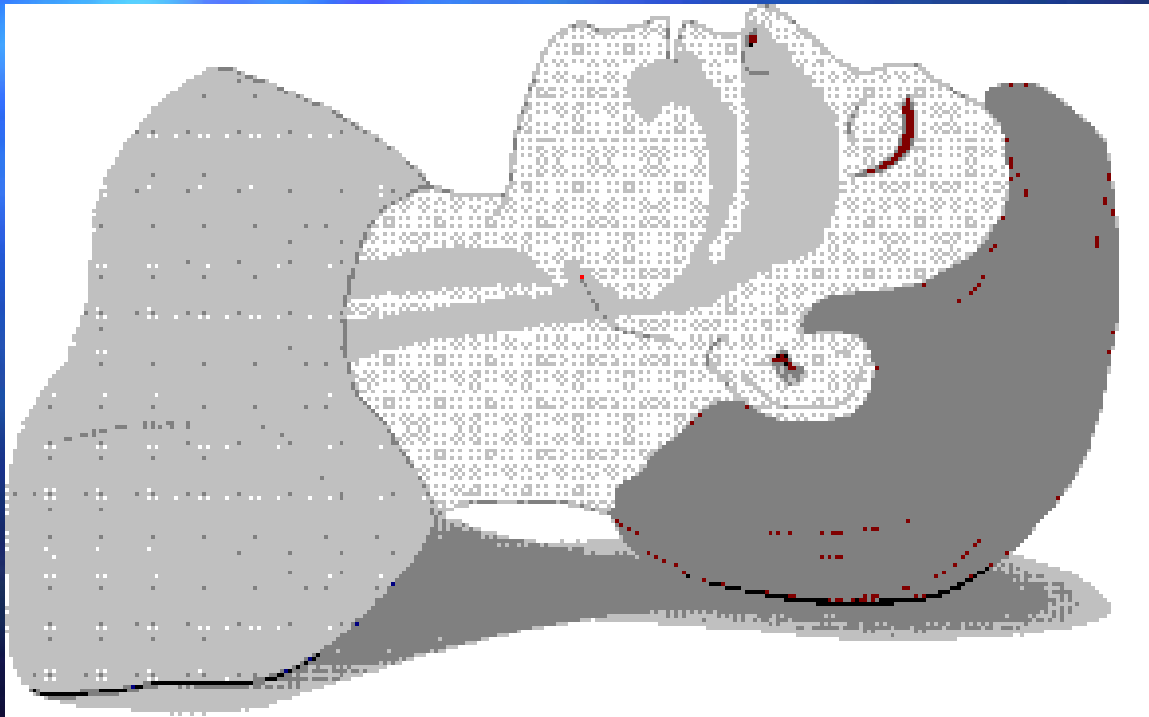


Airway Injuries

- Vitally important
- Airway either patent, partially blocked or blocked
- Due to blockage in tube, in wall of tube or pressing from outside
- Examples?
- Most common cause?

THE TONGUE

- THE TONGUE IS THE MOST COMMON AIRWAY OBSTRUCTION IN THE UNCONSCIOUS CASUALTY.



Diagnosis / Level of consciousness

***ARE THE PATIENT
CONCIOUS ?***

***Note: any patient who can
talk has open airways!!!***



Airway Management

- Open mouth - LOOK
- Simple airway manoeuvres

Airway Maneuvres

Problems due to soft tissue collapse :

- Head tilt / Chin lift
- Jaw thrust in case of suspect C-spine injury (trauma)

Diagnosis

- **Look**
- **Listen**
- **Feel**

Diagnosis

- LOOK

- IS THERE TRACHEAL TUG ?
- IS THERE PERIPHERAL CYANOSIS ?
- IS THE CHEST RISING AND FALLING ?

- DON'T FORGET THE MOUTH

Diagnosis

- LISTEN

- IS THE BREATHING NOISY ?

- INSPIRATORY WHEEZE= UPPER AIRWAY OBSTUCTION (FOREIGN BODY)

- EXPIRATORY WHEEZE= LOWER AIRWAY OBSTUCTION (ASTHMA / PNEUMONIA)

- IS THERE BREATH SOUND

- IF NOT, TAKE ACTION **NOW**

Diagnosis

- FEEL

- IS THE RISE AND FALL OF THE CHEST ADEQUATE ?
- CAN YOU FEEL THE BREATH ON YOUR CHEEK ?

FREE AIRWAYS ?

- **RECOGNITION OF AIRWAY OBSTRUCTION**

- THREE MAIN CAUSES:

- THE TONGUE

- USUALLY IN THE UNCONSCIOUS CASUALTY

- OBSTRUCTION BY FOREIGN MATTER

- VOMIT, BLOOD OR FOREIGN BODY

- INCLUDES SWELLING OF SOFT TISSUES

- NORMALLY SEEN WITH BURN INJURIES

- FACIAL TRAUMA

Airway Maneuvres

FOREIGN OBJECTS

- Finger sweep
- Heimlich maneuvers (not on unconscious patients)

Airway Management

- Suction
- Airway adjuncts
- Definitive airway
- Emergency cricothyroidotomy

AIRWAY MANAGEMENT

■ SUCTION

– OFTEN OVERLOOKED AS AID TO PRE HOSPITAL AIRWAY MANAGEMENT

■ COMMON FORMS OF SUCTION:

- VITALGRAPH (HAND HELD)
- LAERDEL PORTABLE SUCTION (DC AND BATTERY)
- CAPE SUCTION (FOOT OPERATED DEVICE)

Airway Adjuncts

- Oropharyngeal airway
- Nasopharyngeal airway
- Indications / contra-indications of each
- Sizing and insertion

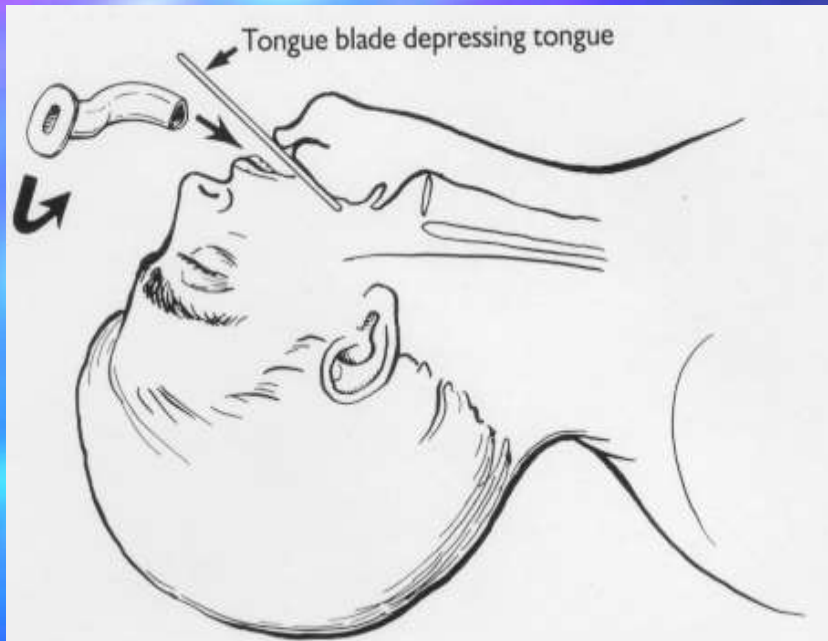
AIRWAY MANAGEMENT

■ OROPHARYNGEAL AIRWAY

- SIMPLE “J” SHAPED PLASTIC TUBE
- USED TO PREVENT THE TONGUE FROM BLOCKING THE AIRWAY
 - DOES NOT PROTECT THE AIRWAY FROM ASPIRATION (VOMIT, BLOOD)
 - AVAILABLE IN SIZES FROM NEONATE TO LARGE ADULT (2,3,4 ARE THE COMMON ADULT SIZES)

J TUBE

- MEASURE
- INSERT



OROPHARYNGEAL AIRWAY PLACEMENT

Airway Adjuncts

OROPHARYNGEAL AIRWAY



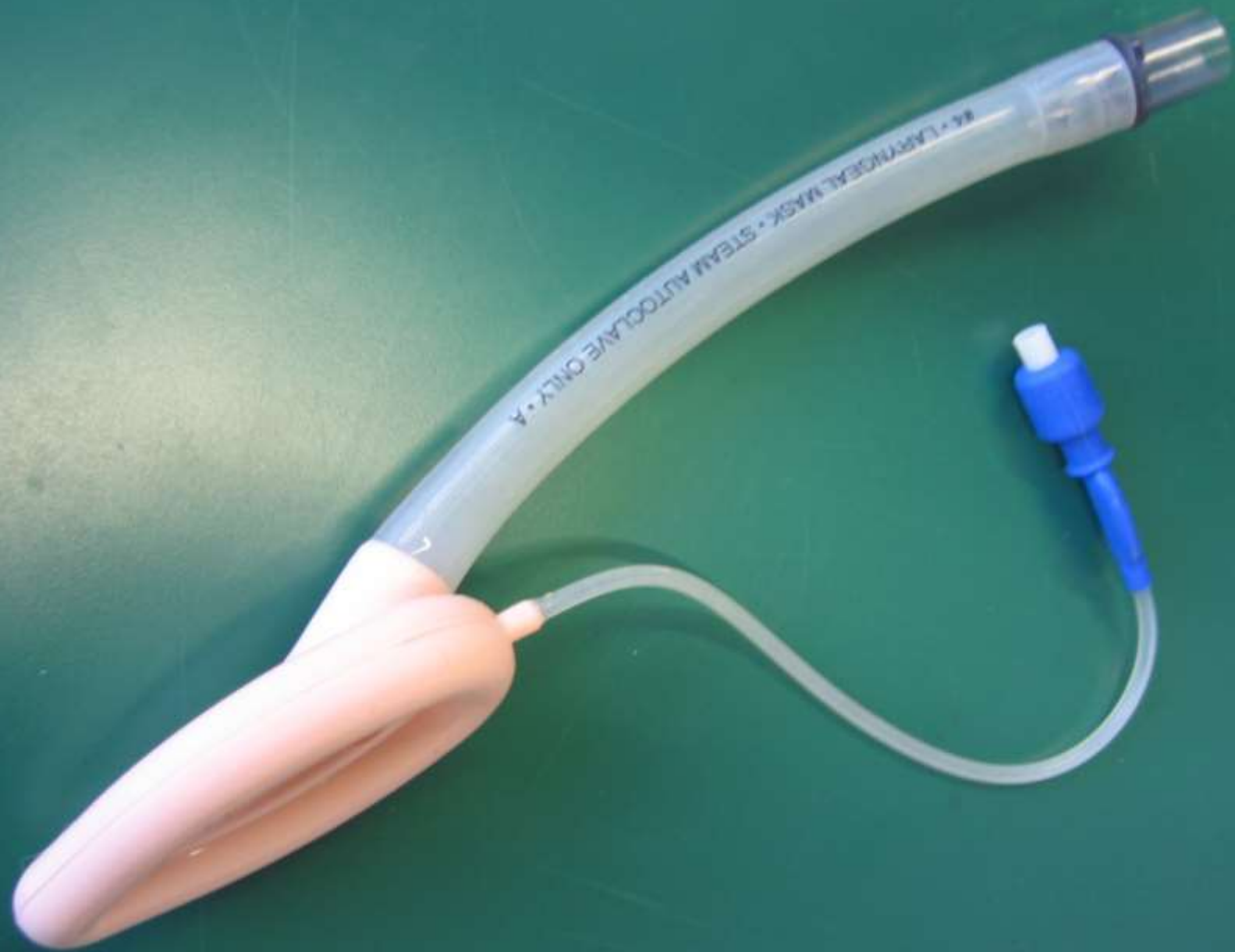
NASOPHARYNGEAL AIRWAY



AIRWAY MANAGEMENT

- Alternative methods





AIRWAY MANAGEMENT

■ ENDOTRACHEAL INTUBATION

- THE “GOLDEN STANDARD” FOR AIRWAY MANAGEMENT
- ISOLATES THE AIRWAY
 - PREVENTS GASTRIC DISTENTION
 - AIRWAY IS “GUARDED FROM ASPIRATION INJURIES



ENDOTRACHEAL

■ PRECAUTIONS

- REQUIRES SKILLS AND EQUIPMENT
- CASUALTY MUST BE DEEPLY UNCONSCIOUS/ANAESTHETIZED
- CAN CAUSE LARYNGOSPASM, VOMITING, OR SOFT TISSUE DAMAGE
- **NOT A SKILL APPROPRIATE FOR THE PATROL MEDIC.**

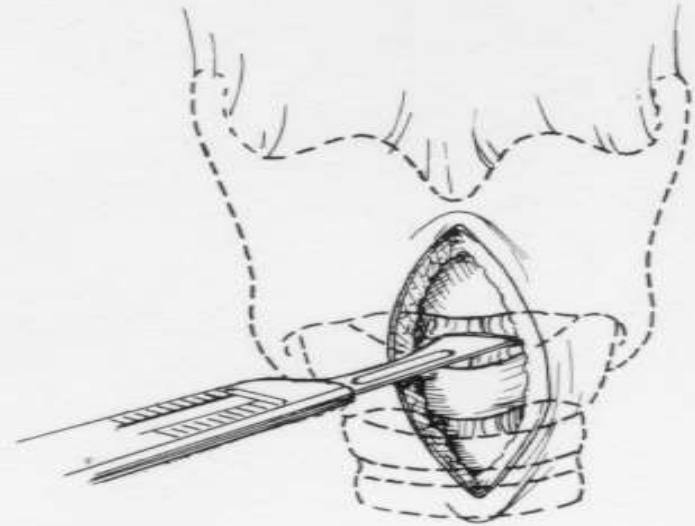
Surgical Airway

Surgical cricothyroidotomy

- Indications include severe facial fractures, airway burns, prolonged transportation
- Not for children <12
- Complications ?



Cricothyroidotomy



Elective Cricothyroidotomy



CRICO

- Alternative methods



C-T.TCCS1093

MELKER EMERGENCY CRICOTHYROTOMY CATHETER SETS



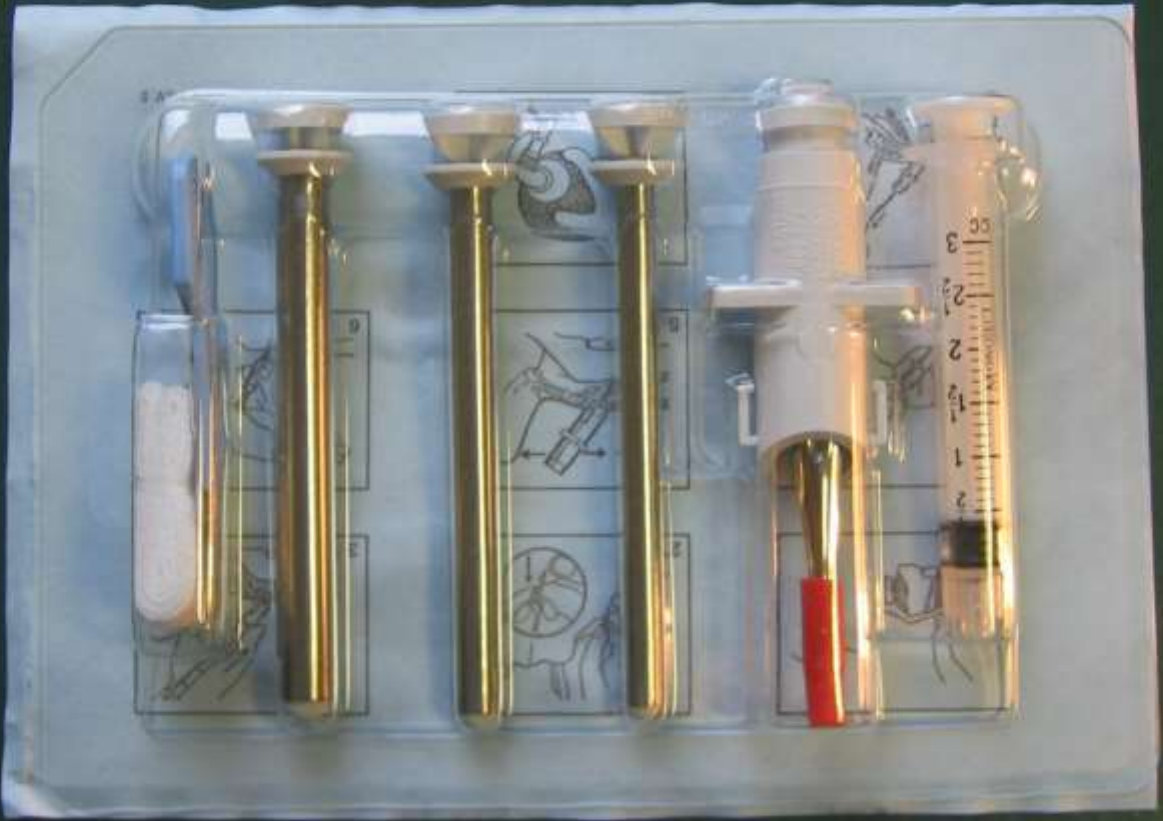
Suggested
Instructions For
PLACEMENT

COOK®
CRITICAL CARE





**Bivona NU-TRAKE®
Cricothyrotomy Device**



Ventilation

- Mouth to mouth
- Pocket mask
- Mouth to tube (cric)



AIRWAY MANAGEMENT

- EXPIRED AIR VENTILATION
 - BASIC MOUTH TO MOUTH
 - REQUIRES MINIMAL SKILLS AND EQUIPMENT
 - ONLY OFFERS 16% OXYGEN
 - DANGER OF GASTRIC DISTENTION

AIRWAY MANAGEMENT

■ POCKET MASK

- PROVIDES PHYSICAL BARRIER
- ONE SIZE FITS CHILD AND ADULT
- CAN BE USED WITH C-SPINE PRECAUTIONS
- NEW MODELS HAVE OXYGEN PORT FOR ADDITIONAL OXYGEN SUPPORT

AIRWAY MANAGEMENT

- AIRWAY INSUFFICIENCY WILL KILL YOUR CASUALTY QUICKER THAN ANYTHING ELSE!
- ALWAYS CHECK AND RECHECK THE CASUALTY'S AIRWAY
- CONTINUE TO MONITOR THE CASUALTIES RESPIRATIONS OFTEN
 - RESPIRATORY STATUS CAN CHANGE RAPIDLY

ANY QUESTIONS

