



PLAN D

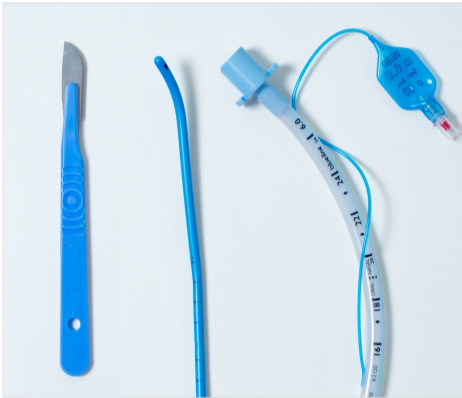
Emergency front of neck access

Action cards

PLAN D: Emergency front of neck access

For right handed operator

Equipment



Help

Declare **CICO**, ensure neuromuscular blockade

Oxygenate

Facemask / high flow nasal O₂/ SAD

Equipment

Size 10 scalpel, bougie, 6mm cuffed tube

Position



Patient

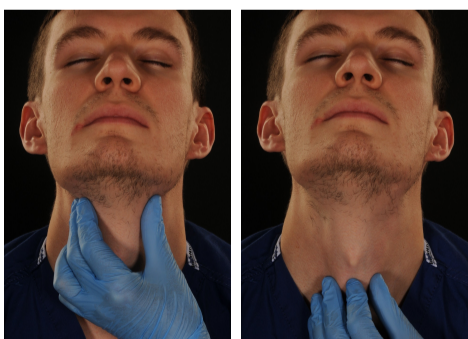
Head extended, no rotation

Pillow between scapulae

Operator

On the **left** side of the patient

Locate



Landmarks

Laryngeal handshake: **left** hand

Locate cricothyroid membrane

Stretch skin, fix trachea: **left** thumb & middle fingers

The following techniques rely on feel rather than visualisation as blood is likely to obscure the surgical field

For right handed operator

Stab Twist Bougie Tube



Stab

Transverse incision: **right** hand



Twist

Keep scalpel perpendicular to patient
Twist scalpel, sharp side towards feet
Traction on scalpel towards you, handle upright
Swap hands: hold scalpel with **left** hand
Take bougie in **right** hand



Bougie

Hold near angled tip: **right** hand
*Parallel to floor, perpendicular to trachea
Push bougie against **far** side of blade
Insert and rotate through 90° towards feet
Advance to 10cm



Tube

Stretch skin + stabilise trachea: **left** hand
Rotate tube through incision: **right** hand
Inflate cuff, check ventilation: **CO₂**
Check depth of tube and secure

For right handed operator

Scalpel Finger Bougie Technique



Cut

8-10cm vertical skin incision
From sternal notch towards chin



Finger dissection of soft tissues

Use both hands to pull strap muscles apart
Identify cricothyroid membrane
Stabilise trachea: **left hand**



Stab twist bougie tube

Transverse incision: **right hand**
Twist scalpel, blade towards feet
Stabilise trachea: **left hand**
Railroad size 6 tube over bougie to 10-15cm
Inflate cuff



Check

Ventilation: waveform **CO₂**
Check tube depth
Secure the tube

PLAN D: Emergency front of neck access

For **left** handed operator

Equipment



Help

Declare **CICO**, ensure neuromuscular blockade

Oxygenate

Facemask / high flow nasal O₂/ SAD

Equipment

Size 10 scalpel, bougie, 6mm cuffed tube

Position



Patient

Head extended, no rotation

Pillow between scapulae

Operator (left handed operator)

On the **right** side of the patient

Locate



Landmarks

Laryngeal handshake: **right** hand (left handed operator)

Locate cricothyroid membrane

Stretch skin, fix trachea: **right** thumb & middle fingers

The following techniques rely on feel rather than visualisation as blood is likely to obscure the surgical field

For **left** handed operator

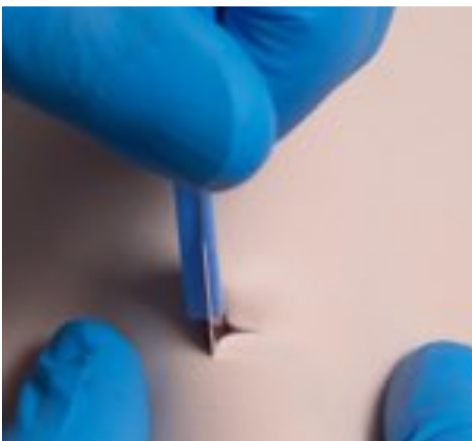
Stab Twist Bougie Tube



For **left** handed operator

Stab

Transverse incision: **left** hand



Twist

Keep scalpel perpendicular to patient
Twist scalpel, sharp side towards feet
Traction on scalpel towards you, handle upright
Swap hands: hold scalpel with **right** hand
Take bougie in **left** hand



Bougie

Hold near angled tip: **left** hand
*Parallel to floor, perpendicular to trachea
Push bougie against **far** side of blade
Insert and rotate through 90° towards feet
Advance to 10cm



Tube

Stretch skin + stabilise trachea: **right** hand
Rotate tube through incision: **left** hand
Inflate cuff, check ventilation: **CO₂**
Check depth of tube and secure

For **left** handed operator

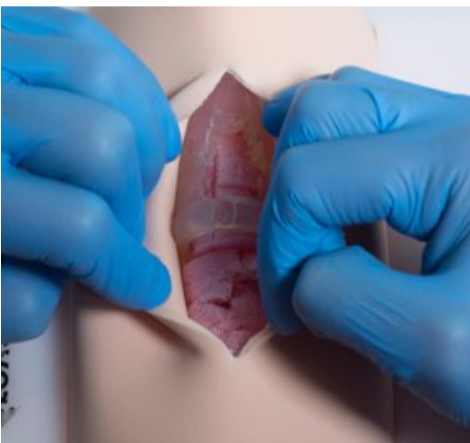
Scalpel Finger Bougie Technique



For **left** handed operator

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From sternal notch towards chin



Finger dissection of soft tissues

Use both hands to pull strap muscles apart
Identify cricothyroid membrane
Stabilise trachea: **right** hand



Stab twist bougie tube

Transverse incision: **left** hand
Twist scalpel, blade towards feet
Stabilise trachea: **right** hand
Railroad size 6 tube over bougie to 10-15cm
Inflate cuff



Check

Ventilation: waveform **CO₂**
Check tube depth
Secure the tube

Teaching framework scalpel for cricothyroidotomy



For use as a prompt when teaching.

1: Scalpel Bougie station (palpable cricothyroid membrane)

Communication	Completed?
Confirm Neuromuscular blockade	
Declare CICO and transition to front of neck access	
Rescue oxygenation	Completed?
Ensure attempts to oxygenate via upper airway are maintained: Facemask ventilation/ high flow nasal oxygen/ SAD	
Equipment	Completed?
List and explains equipment	
Scalpel size 10 or 20 (broad blade similar width to tube)	
Bougie with angled tip	
Size 6 tube	
10ml syringe	
Self inflating bag or circuit	
Position	Completed?
Extend patients neck	
Stand on left hand side of patient if right handed (reverse if left handed)	
Technique*	Completed?
Perform laryngeal handshake with left hand	
Locate CTM with left index finger	
Stabilise larynx with left hand	
Use index finger to locate CTM	
Stretch skin over CTM using left thumb and middle finger	
Make transverse stab incision with cutting edge towards operator	
Apply gentle traction towards operator, twist blade through 90 ^o (blade points towards feet) creating triangular hole	
Swap hands maintaining traction	
Keep scalpel perpendicular to skin	
Hold bougie near coude tip with dominant hand	
Position bougie parallel to floor and at right angles to the trachea	
Insert bougie using scalpel blade as a guide	
Rotate bougie to align with trachea and advance (to 10-15 cm)	
Note that clicks or hold up may be present	
Stabilise trachea and tension skin with left hand	
Rotate tube over bougie as it is advanced	
Remove bougie & ventilate checking for CO ₂	
Check depth of tube and secure	
Progress to scalpel finger if unsuccessful	
Difficulties	Completed?
Excessive lateral traction causing obstruction	
Scalpel slips out of trachea when creating triangular hole	
Scalpel not held perpendicular	
Inserting bougie vertically not horizontally	
Bougie inserted too deep	
Failure to rotate tube when railroading	
Inserting tube too deep	
Holding bougie instead of stabilising trachea on insertion	

***Reverse instructions if left hand dominant**

2: Scalpel Bougie finger technique (impalpable anatomy or failed scalpel bougie technique)

Communication	Completed?
Confirm neuromuscular blockade	
Declare CICO and need for front of neck access	
Rescue oxygenation	Completed?
Ensure attempts to oxygenate via upper airway are maintained: Facemask ventilation/ high flow nasal oxygen/ SAD	
Equipment	Completed
List and explain equipment Scalpel size 10 or 20 (broad blade similar width to tube) Bougie with angled tip Size 6 tube 10ml syringe Self inflating bag or circuit	
Position	Completed?
Extend patients neck Stand on left hand side of patient if right handed (reverse if left handed)	
Technique*	Completed?
Perform laryngeal handshake with left hand	
Discuss USS if immediately available	
Position as for scalpel bougie	
Tension skin with left hand	
Makes 8-10cm vertical incision caudal to cephalad	
Use both hands to blunt dissect/ separate tissues and identify airway	
Stabilise airway with left hand	
Proceed as for scalpel bougie	
Difficulties	Completed?
Transverse instead of vertical incision	
Inadequate or excessive depth of scalpel incision	

***Reverse instructions if left hand dominant**