

# RAPID SEQUENCE INDUCTION

MODULE: NOVICE

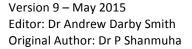
TARGET: NOVICE ANAESTHETISTS

# **BACKGROUND:**

This scenario is intended to allow a novice anaesthetist in his/her first few weeks of anaesthetic training to perform an uncomplicated rapid sequence intubation in simulated conditions.

# RELEVANT AREAS OF THE ANAESTHETIC CURRICULUM

IG_BS_01	Demonstrates safe practice in checking the patient in the anaesthetic room
IG_BS_02	Demonstrates appropriate checking of equipment prior to induction, including equipment for
	emergency use
IG_BK_03	In respect of the equipment in the operating environment:
	<ul> <li>Demonstrates understanding of the function of the anaesthetic machine, including:</li> </ul>
	<ul> <li>Performing proper pre-use checks</li> </ul>
	<ul> <li>Changing/checking the breathing system.</li> </ul>
IG_BS_04	Demonstrates safe practice in selecting, checking, drawing up, diluting, labelling and administering
	of drugs.
IG_BS_06	In respect of monitoring:
	Demonstrates appropriate placement of monitoring, including ECG electrodes and NIBP
	cuff
	Manages monitors appropriately e.g. set alarms; start automatic blood pressure
	Demonstrates proficiency in the Interpretation of monitors
IG_BS_07	Demonstrates effective pre-oxygenation, including correct use of the mask, head position and clear
	explanation to the patient.
IG_BS_08	In respect of intravenous induction:
	Makes necessary explanations to the patient
	Demonstrates satisfactory practice in preparing drugs for the induction of anaesthesia
	Demonstrates proper technique in injecting drugs at induction of anaesthesia
	Manages the cardiovascular and respiratory changes associated with induction of general
	anaesthesia
IG_BS_10	In respect of airway management:
	Demonstrates optimal patient position for airway management.
	Manages airway with mask and oral/nasopharyngeal airways
	Demonstrates hand ventilation with bag and mask
	Able to insert and confirm placement of a Laryngeal Mask Airway
	Demonstrates correct securing and protection of LMAs/tracheal tubes during movement,
	positioning and transfer
ES_BS_03	Manages rapid sequence induction in the high risk situation of emergency surgery for the acutely ill
	patient
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# **INFORMATION FOR FACULTY**

#### **LEARNING OBJECTIVES:**

- Preparation and checks prior to inducing anaesthesia
- Safe rapid sequence induction technique

# **SCENE INFORMATION:**

Location: Anaesthetic Room
 Expected Duration of Scenario: 15 minutes
 Expected Duration of Debriefing: 25 minutes

#### **EQUIPMENT & CONSUMABLES**

#### PERSONS REQUIRED

Manikin – On theatre trolley. Checked anaesthetic machine Stocked Airway trolley & Simulated Anaesthetic drugs Anaesthetic Novice Anaesthetic Assistant Anaesthetic Senior Trainee/Consultant

# PARTICIPANT BREIFING: (TO BE READ ALOUD TO PARTICIPANT)

This is a fit and well 26 year old patient due to undergo anaesthesia for a strangulated hernia repair.

The patient has no medical problems, no regular medication use and no allergies.

The patient is not fasted and is consented for the operation.

Their airway examination is unremarkable.

Please perform the anaesthetic induction.

# 'VOICE OF MANIKIN' BRIEFING:

You are 26 years old and due to have a repair of a strangulated hernia.

The hernia has been coming and going over the last two days.

The pain has been increasing and you have vomited twice since yesterday.

You are otherwise well with no medical problems or allergies. You have never had an operation before.

# 'ANAESTHETIC ASSISTANT' BRIEFING:

Perform pre-operative checks when the patient arrives in the anaesthetic room (check ID, medical history, dental state, fasting state, surgical site marked, consent signed etc.).

Help the participant attach monitoring and IV access (if required).

Assist the participant in performing the rapid sequence induction of anaesthesia.





#### CONDUCT OF SCENARIO

#### **INITIAL SETTINGS**

- A: Patient and Self-maintained
- B: RR 14, SpO2 96% RA
- C: HR 90 (Sinus), BP 120/80
- D: Eyes open and alert
- E: Hospital gown.

#### **EXPECTED ACTIONS**

- Ensure that anaesthetic machine is checked.
- Ensure that the induction drugs and emergency drugs are drawn up and correctly labelled.
- Review anaesthetic plan with assistant (RSI, size of Laryngoscope and ETT)
- Allow assistant to perform check-in and WHO.
- Review history and examination if required.
- Attach monitoring
- Check IV access
- Optimise position of patient prior to induction.
- Suction on and ready at hand
- Ensure that table tilts head down
- Ensure presence of third person In room
- Pre-oxygenate
- Give appropriate RSI drugs

### INDUCTION

- A: Patient and Self-maintained
- B: RR falls to 0 over 1 min
- C: HR 80 (Sinus), BP falls to 140/90 during laryngoscopy, then falls to 90/60 over 2 mins
- D: Eyes closed (AVPU). Fasciculations 30
- seconds after Suxamethonium, lasting 10 secs.

#### **EXPECTED ACTIONS**

- Maintain airway seal with mask
- No ventilation
- Await fasciculations, or time 45-60 secs after Suxamethonium administration
- Check for adequate relaxation and depth of anaesthesia
- Perform laryngoscopy
- Intubate airway, use bougie if necessary
- Check ETT position: etCO2, chest expansion, auscultation.
- Secure ETT in position.
- Tape eyes (as per local practice)
- Get ready to transfer to theatre (disconnect monitoring, turn off vaporiser, reduce O2 flow, disconnect circuit from HME filter).

#### LOW DIFFICULTY

No difficulties encountered

# **NORMAL DIFFICULTY**

SpO2 fall to 92% over 3 mins if tube not in place.

#### **RESOLUTION**

When patient is safe to transfer to theatre

# HIGH DIFFICULTY

### Any one of these events:

- On laryngoscopy: participant is told that oropharynx is filled with fluid:
  - Head down, suction, intubate and consider suction catheter.
- Fixed neck and swollen tongue make airway slightly more difficult:
  - Use bougie to intubate.



		ANA	ESTI	HETI(	CRE	CORD SH	EET			
PATIENT DETAI Hospital No.	ILS / AD	DRESSOGRAPH						NF	15	
SURNAME: (Block Letters)		el Robson								
FORENAMES:	26 year	rs old		Proce	dure(s	) proposed:		-		
Address: Ward/Hosp.				Stran	gulate	d Inguinal Hernia	a repair			
DOB:		Sex: M / F			CLASS			URGENT / EM	IERGENCY	
		Anaesth	etist'	s pred	opera	ıtive assessr	nent by			
Name:		***************************************			Grad	e: Cons DA	s □sg	☐Trainee		
Date:		Time:			Sign	ature				
Anaes / Surg	history	<b>'</b> :				O/E			ASA	
No previous	s GAs					Unremarka	ble		BP:	
Medical histo	ry:								HR:	
Fit and well	usually								Temp:	
become irre	ucible hernia present for several weeks. Has ome irreducible, hard and painful over the last 48					<i>Airw</i> Mouth Oper	<i>ay Assess</i> ning:	ment	Weight:	
nours. 2 x e	pisoaes	of vomiting in the	e last 1	2 nours		MP Score:  Jaw: MP 1,			Height:	
						Neck: 3cm.		6	BMI:	
							TEETH		Smoke:	
_						876543	321 12	3 4 5 6 7 8		
VTE Risk:	High	Low				87654321 12345678 Alcohol:				
NBM Solids: since Clear Flu	ıids:		Pregna Lactatio		eg	X = missing C = caps / crowns	L = loose D = damag	B = bridge	Apfel Score	
Relemedicatio	ichtistor	У				ALLERGIE	S			
						Nil known				
☐ Haemat	ology	Biochemistry	С	oag.		ECG		Other:		
FBC Hb 11.8		U&E	NAC	)		NAD				
Hb 11.8		NAD		p. & Sa	VO.	X - Ray				
vest						I X - Itay				
Sickle:		Blood Sugar:	□ ×	- Match	1					
CONSENT:	GA	Sedation		Epidura	ıl	Spinal	Region	al Sup	pository	
Notes / Discus	PCA	EPCA echnique propos		Other						
Consented finfiltration.	or GA w	rith RSI and local a	anaesth		р					
		ation leaflet recei		- Contraction						
For attention	of ward	staff: (further in	vestiga	itions, fa	asting,	continue/omit c	urrent medi	cation, etc.)		

All orders / information regarding medication & fluids must be entered on patient's drug prescription & administration record

Date:	Anaesthetist(s	): Nam	e G	rade	Or	era	tion	/ Pr	oceo	lure	e(s):				Sur	geon	(s): N	lame	Grade
Location / Theatre:																			
Supervising Name: Anaesthetic Consultant (S-AC) AOD	Location In The	eatre [	] In T		olex	Dis Wit	scus:	sed AC		Mas	sk		JN	Size asal MA		□ E	Bain		/stem   T-Piec   Tosorber
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)rugs ⊽	Tir (units)	ne:→	1		1					ı	-			1	1		L	1	Total Dose
Oxygen	F <sub>1</sub> O <sub>2</sub>	L/min																	
N <sub>2</sub> O / Air / Total Gas so / Sevo / Des /entilation Mode (SV	E <sub>T</sub> %	L/min Mac																	
req Fidal Volume	/ min ml																		
Paw Peep	cm H <sub>2</sub> (																		
Events: v	Event 100	No. <b>→</b>					-												250
	SpO <sub>2</sub> % 90	BP HR 200 —																	200
Position Of Patie ☐ Supine ☐ Pror		150																	150
☐ L-Lateral ☐ R-La☐ Lithotomy ☐ DHS☐ Deck Chair	ateral BP V S Table Dia	100 -																	-100
<b>Tourniquet (site / t</b> Bite: On :	imes) BP /\																		
Off : <b>DVT Prophylaxis</b> ☑ Heparin ☑ Rivard	oyahan	50 -																	-50
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Eyes Protected Pressure areas pa																			
☐ Warming Blanket ☐ Fluid Warmer ☐ Warming Mattress	Blood																		
Comments:	31110														Nam	e:	tic Red	cord E	ntered By:
Post Op	/ recovery instr	uctions	s:						(1)						Grad Sign				
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DEBRIEFING	
POINTS FOR FURTHER DISCUSSION:	
DEBRIEFING RESOURCES	





# **INFORMATION FOR PARTICIPANTS**

#### **KEY POINTS:**

- Preparation and checks prior to inducing anaesthesia
- Safe rapid sequence induction technique

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# **FURTHER RESOURCES**

Sinclair R, Luxton M. Rapid Sequence Induction. Contin Educ Anaesth Crit Care Pain 2005. 5(2): 45-48 <a href="http://ceaccp.oxfordjournals.org/content/5/2/45.full.pdf">http://ceaccp.oxfordjournals.org/content/5/2/45.full.pdf</a>+html

BY NC SA



#### PARTICIPANT REFLECTION:

TAKHER ANT KELECHOM
What have you learnt from this experience? (Please try to list 3 things)
How will your practice now change?
The state of the s
What other actions will you now take to meet any identified learning needs?





PARTICIPANT FEEDDACK	
Date of training session:	
Profession and grade:	 
What role(s) did you play in the scenario? (Please tick)	
Primary/Initial Participant	
Secondary Participant (e.g. 'Call for Help' responder)	
Other health care professional (e.g. nurse/ODP)	
Other role (please specify):	
Observer	

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I found this scenario useful					
I understand more about the scenario subject					
I have more confidence to deal with this scenario					
The material covered was relevant to me					

Please write down one thing you have learned today, and that you will use in your clinical practice.

How could this scenario be improved for future participants?

(This is especially important if you have ticked anything in the disagree/strongly disagree box)



# **FACULTY DEBRIEF – TO BE COMPLETED BY FACULTY TEAM**

What went particularly well during this scenario?
What did not go well, or as well as planned?
what did not go wen, or as wen as planned:
Why didn't it go well?
How could the scenario be improved for future participants?

