

Focused Transoesophageal Echocardiography Safety Checklist

Date:

Operator:

Affix Patient Sticker Here

BEFORE THE PROCEDURE		
Recognised indication (see overleaf)?	Yes	No
Relative contraindications? <i>(if yes tick in box overleaf)</i>	Yes	No
Absolute contraindications? <i>(if yes tick in box overleaf)</i>	Yes	No
NG aspirated and feed stopped?	Yes	No
Any drug allergies?	Yes	No
TOE probe clean and ready for use?	Yes	No
Patient on anticoagulants?	Yes	No
Coagulation acceptable/corrected?	Yes	No
Adequate monitoring and equipment?	Yes	No
Any patient risk factors for major complication present? <i>(see back)</i> <i>If yes – details:</i>	Yes	No

TIME OUT		
Verbal confirmation before start of procedure		
Previous intubation grade?	
Patient position optimal?	Yes	No
Adequate sedation and muscle relaxant?	Yes	No
Probe insertion checks:	<ul style="list-style-type: none"> • Bite block • Lubrication • Laryngoscope • Lock off 	
Avoid excessive force or excessive probe manipulation		
Difficulty inserting probe?	Yes	No
If yes, then abandon procedure		

Documented by:

Signed:

Date & time:

SIGN OUT		
All TOE images stored?	Yes	No
Procedure documented in notes?	Yes	No
TOE probe and bite block removed?	Yes	No
TOE appropriately cleaned?	Yes	No
Any blood on the probe?	Yes	No
Any immediate complications?	Yes	No
Details:		
.....		
.....		
NG tube confirmed? <i>(NG aspirate pH <5.5 or CXR confirmation)</i>	Yes	No
Reviewed by (name/GMC):		
.....		
.....		
Date/ Time:		

Indications (tick all that apply):

Critical care:

- Acute persistent life-threatening haemodynamic compromise when ventricular function is uncertain or not responding to treatment
- Suspected aortic pathology/acute aortic syndrome
- Suspected endocarditis
- Sub-optimal transthoracic echo windows where diagnostic information is not obtainable and information is likely to alter management
- Where transthoracic scan is unable or unlikely to answer the clinical question
- During emergency cardiac life support

Surgery:

- Non-cardiac surgery where there is a high risk of myocardial ischaemia or haemodynamic compromise

- Other:
-

Absolute contraindications:

- Oesophageal pathology – tumour/stricture/perforation
- Active upper GI bleed
- Perforated viscus

Risks

- Invasive procedure with risks of causing direct injury to the patient
- Risk vs. benefit decision
- Risk of TOE related serious complications:
 - Major complication risk (1:1300)
- If a serious complications occurs from TOE there is a about a 40% associated risk of death

Complications

Direct injury:

- Damage lips (1:8)
- Sore throat (1:12)
- Swallowing dysfunction (1:25)
- Oromucosal injury (1:500)
- Damage to teeth (1:1000)
- Oesophageal perforation and GI bleed (1:1250)
- Death (1:3000)

Relative contraindications:

- Oesophageal varices
- Coagulopathy/thrombocytopenia
- Barrett's oesophagus
- Previous upper GI or bariatric surgery
- Oesophagitis
- Dysphagia
- Atlanto-occipital joint dysfunction
- Previous thoracic radiotherapy

Patient risk factors

Certain patients are at increased risk of complication and so these should be taken into account when making a risk benefit decision with regards to performing a TOE. These are:

- Increasing age (over 70)
- Female sex
- Low BMI
- Connective tissue disease
- Prolonged steroid use
- Difficult insertion
- May have no risk factors

References:

- ACC/AHA/ASE Guidelines for the Clinical Application of Echocardiography 1997, 2003
- Practice Guidelines for Perioperative Transesophageal Echocardiography ASA/Society of Cardiovascular Anesthesiologist 2010
- Recommendations for Transoesophageal Echocardiography 2001, 2010 European Association of Echocardiography.
- Guidelines for performing a comprehensive Transoesophageal Echocardiographic examination ASE/Society of Cardiovascular Anesthesiologist 2013
- Association of Anaesthetists fTOE eLearning 2023