PREOPERATIVE PLANNING

Mohan Nallusamy
Sessional Paediatric Surgeon
Ipoh and Alor Setar

OVERVIEW

- General Principles of Decision-making

- Notes from the North: Personal observations
  - diagnosis
  - airway
  - early operation
  - anaesthetic considerations
  - early intraoperative period

Symposium review

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Better clinical decision making and reducing diagnostic error

P Croskerry, GR Nimmo

[1]Clinical Consultant in Patient Safety and Professor in Emergency Medicine, Dalhousie University, Halifax, Nova Scotia, Canada; [2]Consultant Physician in Intensive Care Medicine, Western General Hospital, Edinburgh, UK

This review is based on a presentation given by Dr Nimmo and Professor Croskerry at the RCPE Patient Safety Hot Topic Symposium on 19 January 2011.

ABSTRACT A major amount of our time working in clinical practice involves thinking and decision making. Perhaps it is because decision making is such a commonplace activity that it is assumed we can all make effective decisions. However, this is not the case and the example of diagnostic error supports this assertion. Until quite recently there has been a general nihilism about the ability to change the way that we think, but it is now becoming accepted that if we can think about, and understand, our thinking processes we can improve our decision making, including diagnosis. In this paper we review the dual process model of decision making and highlight ways in which decision making can be improved through the application of this model to our day-to-day practice and by the adoption of de-biasing strategies and critical thinking.

KEYWORDS Critical thinking, decision making, diagnosis, patient safety

DECLARATION OF INTERESTS No conflict of interests declared.

Correspondence to ***P Croskerry, Department of Emergency Medicine and Division of Medical Education, Faculty of Medicine, Dalhousie University, QE II – Health Sciences Centre, Halifax Infirmary, Suite 355, 1796 Summer Street, Halifax, Nova Scotia B3H 2Y9, Canada***

tel. ***+1 902 225 0360***
e-mail ***croskerry@eastlink.ca***


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SITUATIONAL AWARENESS

- Perception
- Comprehension
- Projection

SA:PERCEPTION

- Interpretation of Clinical Data
- Arrive at a Diagnosis
- Assess Severity of Pathology

SA:COMPREHENSION

- Know Self Capabilities & Limitations
- Know Human Resource/Expertise & Facilities Available

SA:PROJECTION

- Prediction of Consequences/Problems related to:
  -Anaesthesia
  -Surgical complications

- Ability to Identify & Rectify Complications

NOTES FROM THE NORTH: DISCLOSURE

- Personal experience and observations
- Discover commonality and differences
- Open to scrutiny and dissent
- Stimulate open discussion

DIAGNOSIS

- Early diagnosis essential, but majority delayed
- Antenatal diagnosis difficult
- Classical early symptoms not noted/quoted
- Terms used: ‘not tolerating feeds/vomiting/regurgitation’ rather than ‘choke’
- Occasional larger newborns with even further delay

AIRWAY

- Avoid intubation
- Vigilance in upper pouch suction
- Replogle tube use, maintenance and care
  - standardised protocol
- Safer transfer without intubation
- Urgency of operation post intubation

EARLY OPERATION

- Early diagnosis
- Within 48 hours of life
- Better tolerated
- Avoidance of acquired complications
- Before decompensation of CHD

PREOPERATIVE EVALUATION

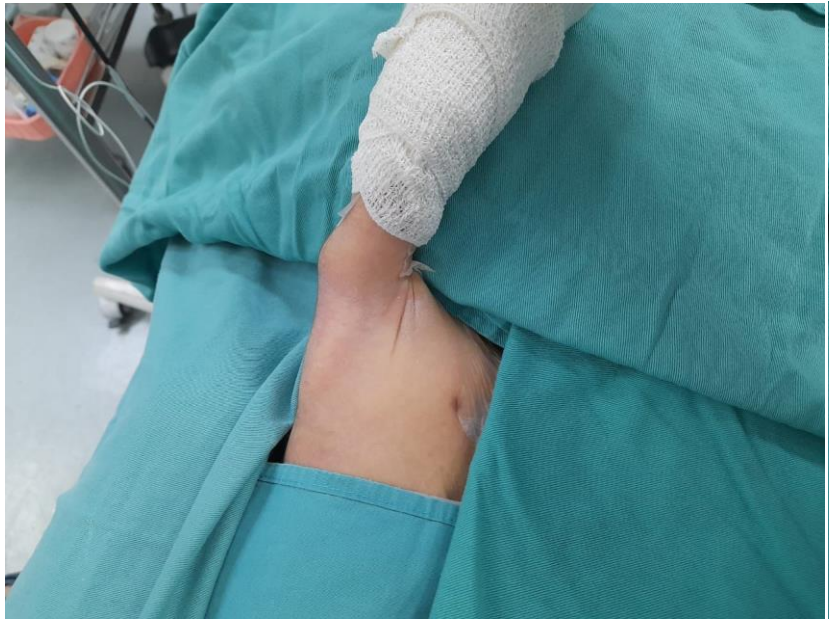
- Associated anomalies: VACTERL
- Clinical examination: ARM, limb
- ‘Hidden’ anomalies: vertebral, urogenital
- ECHO: CHD, importantly aortic arch
  - right side access still possible
- Consent: staged repair/gastrostomy
- Rare situations

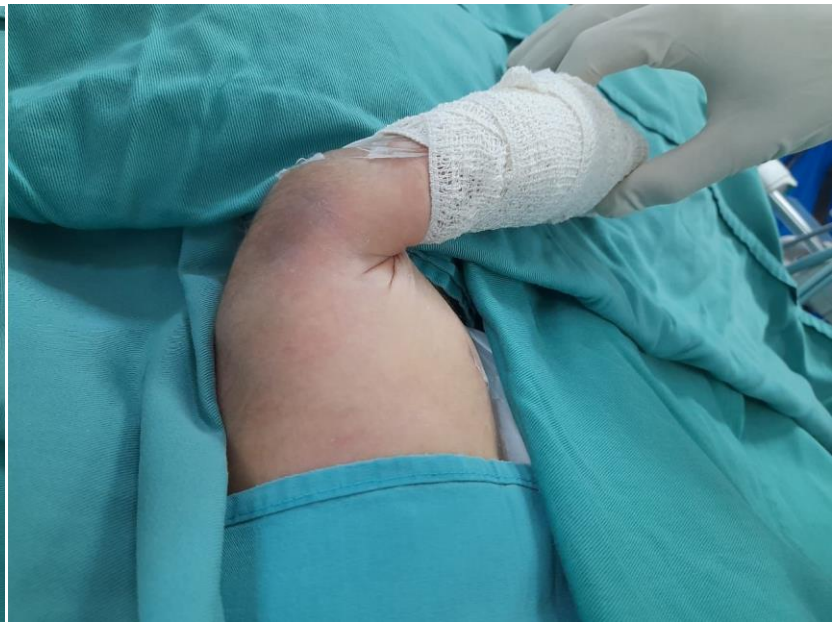
ANAESTHETIC CONSIDERATIONS

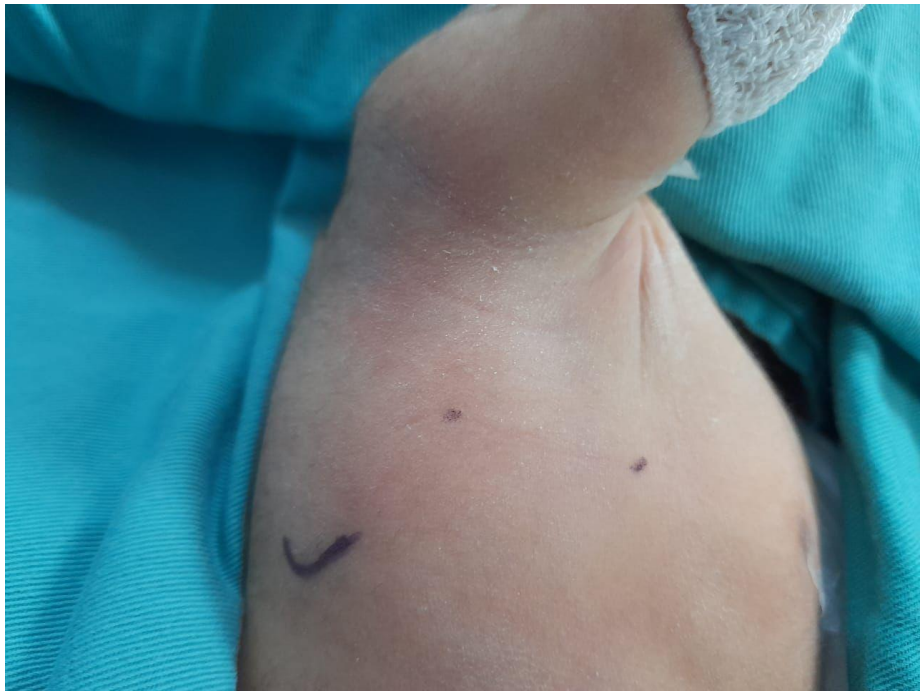
- Open and deliberate discussion
- Pre fistula ligation: spontaneous breathing
  - prevent preferential flow of PPV into stomach
  - prevent over-inflation of R lung, collapsible with retraction, ease extrapleural dissection
- Avoid deep intubation
  - possibility of R intrabronchial migration
  - sudden desaturation/'sensitive' to R lung retraction

EARLY INTROPERATIVE PERIOD

- Without routine bronchoscopy
- R axillary thoracotomy
- Extrapleural for ease of R lung retraction
- Preservation of Azygous vein
- Identify the Vagus n as the landmark
  - mediastinal pleura most adherent
- Beware! Aorta

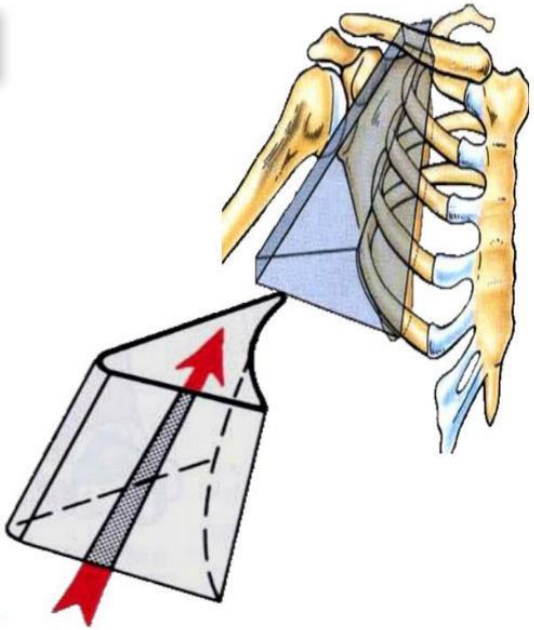


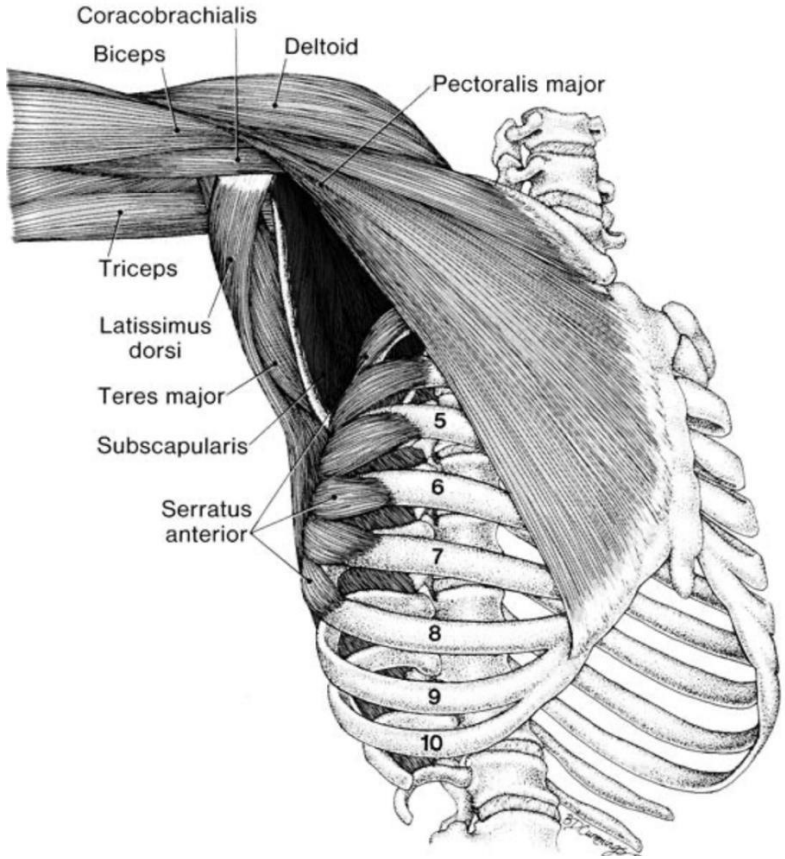


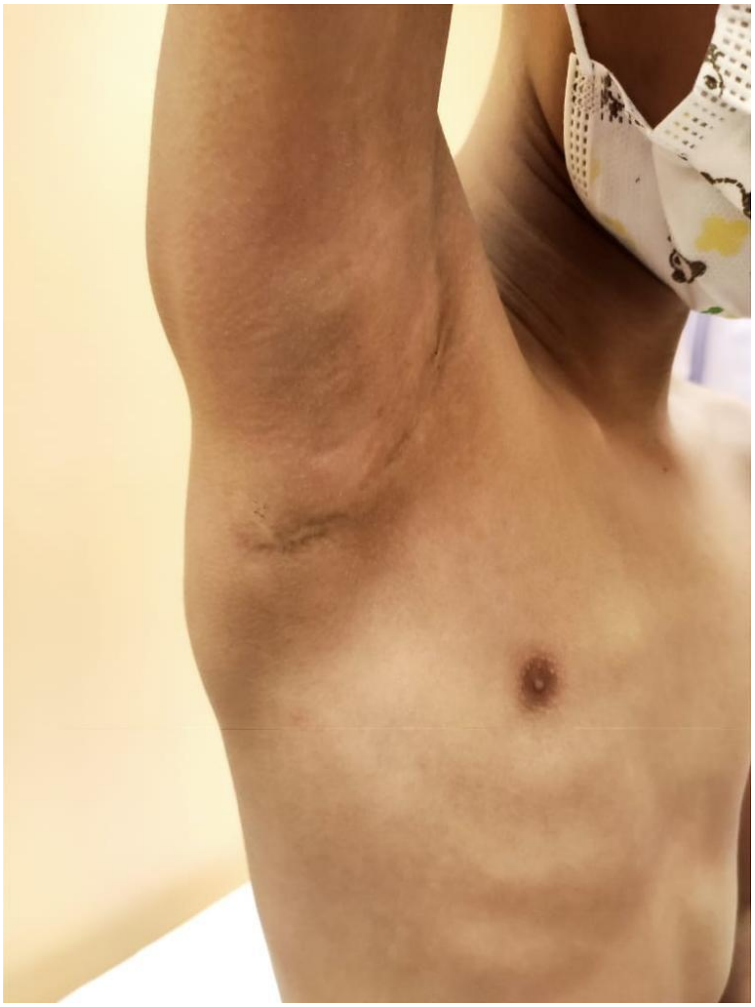


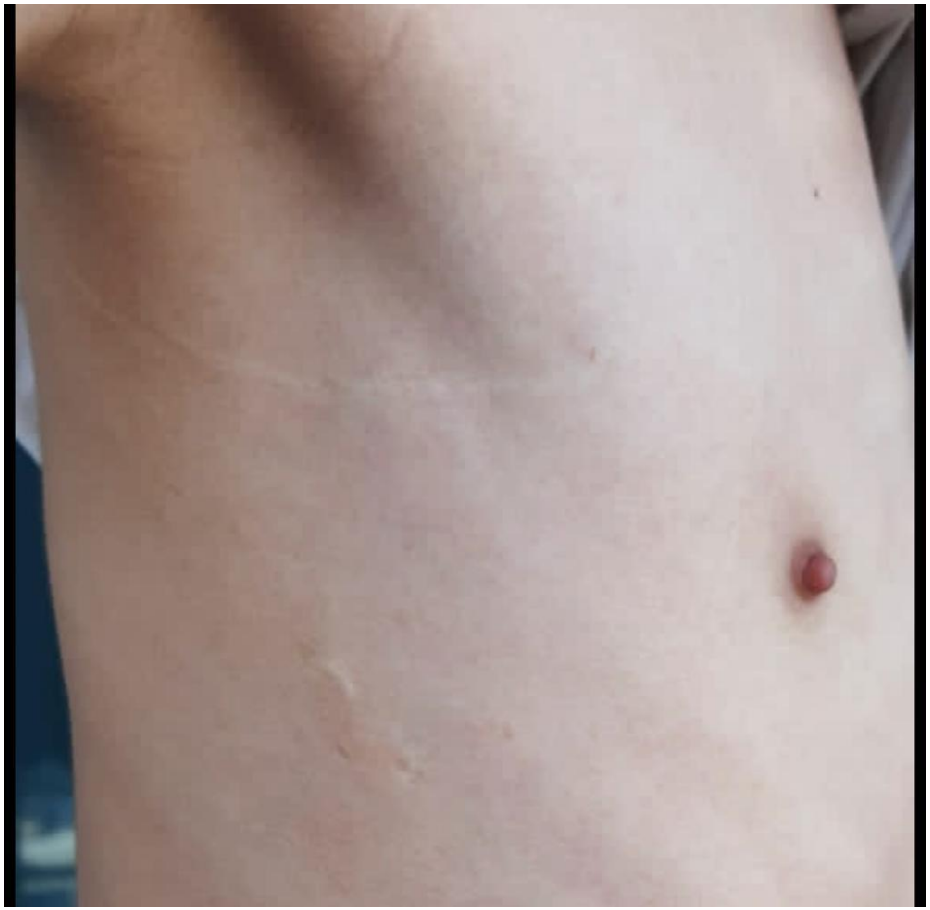
AXILLA

- A pyramid-shaped space between the upper part of the arm and the side of the chest through which major **neurovascular** structures pass between neck & thorax and upper limbs.
- Axilla has an **apex,** a **base** and **four walls.**









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SUMMARY

- Awareness of honing Decision-making skills
- Importance of strategic and Critical Thinking
- Situational Awareness
- Emphasis now on Pooled Clinical Data and our own Observational and Experiential Evidence
- Critical Appraisal of Published information