Nurses Role and Training in Interventional Endoscopic UltraSonography (EUS)

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Aim

- To give a general understanding of the uses of Endoscopic UltraSonography (EUS) and to highlight the integral part that nurses can play in its implementation
Summary

- What is EUS
- The benefits of EUS
- Knowledge and skills
- The Nurses Role
- Strategies implemented
- Conclusions
What Is Endoscopic UltraSonography

- Developed in the early 1980’s

- An Ultrasound transducer incorporated in the tip of an Endoscope

- Produces images of the different layers of the G.I. Tract and adjacent structures
Equipment
The Radial Probe
360 Degree Image
Layers Of The G.I. Tract

- Mucosa/transducer interface and superficial mucosa
- Deep mucosa/muscularis mucosae
- Submucosa
- Muscularis propria
- Serosa
Tumor Types
The Linear Probe
Fine Needle Aspiration
Visualization of needle
The Technique
FNA Celiac Plexus Block
Celiac Plexus Block (CPB)
Celiac Plexus Block (CPB)

- Hypotension as a complication post procedure
- 500ml saline IV drip
- BP monitored 15 minutes for 1 hour and $\frac{1}{2}$ hourly until discharge
Benefits of EUS

- Useful in determining patient diagnosis
- Good at assessing characteristics and spread of tumours
- Allows optimum site for a specimen to be identified under ultrasound guidance
- Provides accurate cytological staging of certain cancers
- Positive impact on patient management
Knowledge and Skills

- Anatomy and Physiology
- Procedures
- Complications
- Equipment
- Accessories
- National and International Guidelines  BSG
  EAG, ESGENA
- Decontamination
Knowledge and Skills

- Care of the Patient
The Nurses Role?
Set Up Scope And Processor
Prepare the accessories
Controllable Suction
Preparation of accessories for CPB

FNA Needle

Saline
During the Procedure

- Three Nurses recommended:
  - One at the patient's head holding the mouth guard
  - One observing the patient's vital signs
  - One assisting the Endosonographer
Assisting the Endosonographer

A. Secure Needle Back

B. Assist to Feed Down Biopsy Channel
Assisting the Endosonographer

C. Remove Stylet

D. Attach Suction
Assisting the Endosonographer

E. Needle Tip Over Slides & Pot

F. Re-introduce Stylet
Strategies Implemented

- Working within the multidisciplinary team
- Set up a change in practice
- Training and development of staff
- Visit other units
- Provide an extra EUS session
- Prepare business cases for new equipment
- Produce documentation and protocols
- Design posters for cleaning equipment and procedures
Conclusion

- Understand the wider implications of staff education and support and the allocation of resources and time
- Involve and interact with other members of Multidisciplinary team
- Demands for this technique are set to grow
- Nurses need to have a comprehensive understanding of the issues involved
- Nurses are a valuable part of the EUS Multidisciplinary Team
THANK YOU AND CIAO