

# Pleuroscopy – Early Malaysian Experience

Dr. Fauzi M. Anshar  
Respiratory Unit  
Department of Medicine  
Faculty of Medicine  
Universiti Kebangsaan Malaysia

# Pleuroscopy / medical thoracoscopy

- Not new
- Earlier physicians have performed pleuroscopy / medical thoracoscopy using flexible fibreoptic bronchoscopes.
  - *“He claims he has been doing pleuroscopies for the past 10 years. He puts in the bronchoscope via a chest tube and he claims that he has taken 80% of his biopsies from the lung with no problems. Some food for thought there”.*
- Safety?

# Introduction in Malaysia

- Physicians trained abroad exposed to new technologies, specific training abroad to learn.
- Realisation of limitations of closed pleural biopsies
  - Sensitivity for TB: histology, culture and combined was 66, 48 and 79% respectively <sup>1</sup>
  - Missed or delay diagnosis?
  - Inevitable referral to thoracic surgeons; more delays.
  - Improvement after introduction of pleuroscopy
    - Sensitivity for TB: histology, culture and combined was 100, 76 and 100% respectively <sup>1</sup>

# Acquisition procedure

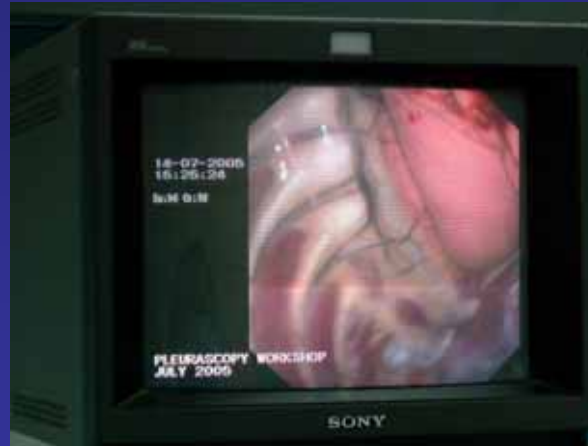
- Interested parties
- Budget
- Application
- Waiting....

# First experience

- HUKM started on its first patient in November 2004.
  - Two chest physicians went to a course in France in June 2003.
  - Acquisition process started soon after.
  - Equipment arrived after 1 year. First patient 9<sup>th</sup> November 2004.
  - 18 patients up to July 2007
- Evolution of technique
- Learning curve
- Trepidations, joy & frustration.
- Expected findings and surprises

# Training

- Workshops:
  - Singapore January 2005
  - Locally:
    - UMMC July 2005
    - Penang July 2006



Trepidations!



Joy!



Frustration!





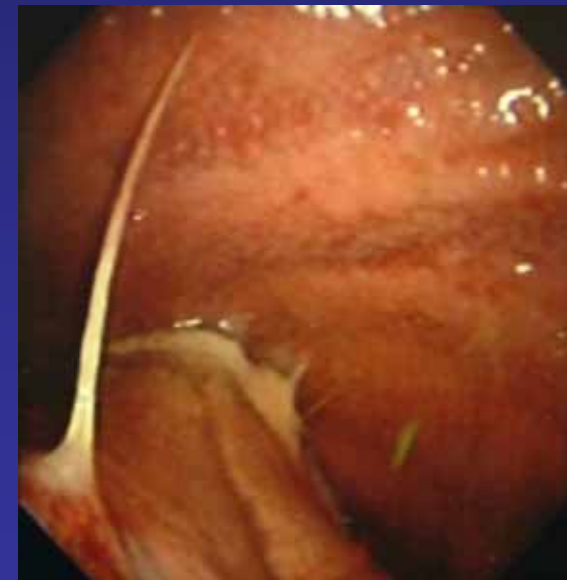
Awe



Sadness



Why do you smoke ?!



Hmm... scratching my head



# Pleuroscopy – ability to do more



# Other centres

Centres	Date started	Patients up to 30 <sup>th</sup> May 2007
Penang	May 2006	9
Kota Kinabalu	September 2006	63
Kuantan	October 2006	13
IPR, KL	April 2007	2
Kuala Terengganu	NA	NA
Alor Setar & UMMC	Awaited	

# Pleuroscopy

- Main indications:
  - Unexplained exudative pleural effusion
  - Evacuation of empyema
  - Pleurodesis (malignant pleural effusion, pneumothorax)
- Ease by which to learn technique
- Very few patients refused to have pleuroscopy

# Pleuroscopy – problems/complications

- No immediate or short term mortality in 101 patients nationwide
- Complications – mild:
  - Pain
  - Subcutaneous emphysema
  - No wound site infection

# Pleuroscopy – diagnoses

- TB, malignancy

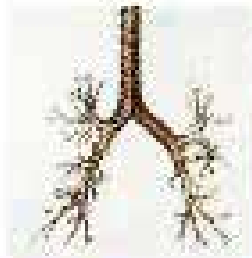
Pt	CPB	Spt smear	Spt Culture	Pleural Asp Smear	Pleural Asp culture	CPB - HPE	Pleural Asp - PCR	PLEURO - PCR	PLEURO - Culture	PLEURO - HPE
1	No	Neg	Neg	Neg	Neg	-	Neg	Neg	Neg	CGI
2	No	Neg	Neg	Neg	Neg	-	Neg	Positive	Neg	Neg
4	Yes	Neg	Neg	Neg	Positive	Neg	Neg	Neg	Neg	Neg
11	Yes	Neg	Neg	Neg	Neg	Neg	Neg	Positive	Neg	Neg

# Pleuroscopy - Problems unique to Malaysia

- Red tape
- Not enough resources:
  - Manpower (leaving public service)
  - Lack of enthusiasm and lack of support for audit and research

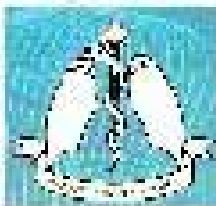
# Pleuroscopy – future direction

- Greater use of pleuroscopy
- Refined technique and more indications
- Collaboration between centres nationwide and with international centres



Kota Kinabalu, Sabah, September 12-13, 2007

# Interventional Bronchoscopy course



Course Director:  
**Dr. Jamalul Azizi Abdul Rahman**

Guest of Honour:  
**Dr. Pyng Lee, MD**



# Acknowledgement

- Malaysian Thoracic Society
- Interested and enthusiastic Malaysian chest physicians:
  - Prof Liam, Dato' Dr Razak, Dr. Chin, Dr. Ashari, Datin Dr. Aziah, Prof Roslina, Prof Roslan, Dr. Faizal, Dr. How, Dr. Jamalul, Dr Kannan, Dr. George and others I may not have mentioned.
- Our Singaporean friends from Singapore General Hospital and Tan Tock Seng Hospital
- Our patients
- Our support staff

Thank you

[drfauzi@mail.hukm.ukm.my](mailto:drfauzi@mail.hukm.ukm.my)