Flow chart for pleurodesis

Pleural effusion or proven malignant pleural effusion

ICD in situ on free drainage. If not proven malignant ensure cytology sent and result confirmed

CXR

No residual fluid or pneumothorax Or < 150ml drained in 24 hrs

Talc Slurry Pleurodesis

Using 3 way tap Instil 25ml of 1% lidocaine solution into pleural space via drain. 3mg/kg. Close drain for 10 minutes for effect

Shake vial to loosen talc then add 40ml of normal saline to 4g talc (using a syringe and needle directly into the talc vial (leave the bung in the bottle). Shake well to mix into talc slurry. Remove the bung and using a large syringe +/- plastic quill (no needle) instil into pleural space via the ICD. Keep solution moving continually and do not delay as the slurry will solidify quickly. Flush drain after instillation and clamp for 1 hour.

Drain removal is advised 12-72 hours provided lung remains expanded and no fluid re-accumulation. (requires further CXR)

Arrange follow up in chest clinic in 4-6 weeks

If residual fluid, continue drainage and consider re-siting drain

Residual pleural shadowing

Repeat ultrasound

Pleural thickening

Thoracic medical opinion: will need further ICD and underwater seal

Pneumothorax

Consider premed sedation in anxious patient. Needs appropriate monitoring

Formal rotation of the patient is unnecessary after pleurodesis

Monitor for signs of ARDS, excessive pain, anaphylaxis

If fluid should re-accumulate, further drainage and repeat talc pleurodesis can be attempted or referral to thoracic surgery should be considered

No residual fluid or pneumothorax

Or < 150ml drained in 24 hrs