CHEST DRAIN INSERTION: TRADITIONAL Supporting information

This guideline has been prepared with reference to the following:

British Thoracic Society. Pleural disease guideline. 2010. BTS

https://thorax.bmj.com/content/65/Suppl 2

Chest X-ray after removal is necessary only if breathing becomes more difficult?

A retrospective chart review of 100 infants with 110 episodes of chest drain removal after 174 chest tube insertions (van den Boom, 2007) showed a low yield for routine radiography: In asymptomatic infants, some reaccumulation of air was detected in 9 of 35 cases of pneumothorax or of fluid in 2 of 5 cases of pleural effusion. In 12 clinically symptomatic infants, chest tubes were reinserted in 5 cases and there was one case of right upper lobe collapse. The authors concluded that "close observation", rather than routine radiography, was "likely to detect clinically relevant recurrence of pneumothorax". This study is the only one to date to focus on neonates. A similar retrospective study on older children also found that clinical signs and symptoms identified "nearly all relevant pneumothoraces" (Pacharn, 2002).

Pacharn P, Heller DN, Kammen BF, et al. Are chest radiographs routinely necessary following thoracostomy tube removal? Pediatr Radiol 2002;32:138-42

van den Boom J, Battin M. Chest radiographs after removal of chest drains in neonates: clinical benefit or common practice? Arch Dis Child Fetal Neonatal Ed 2007;92:F46-8 http://fn.bmj.com/content/92/1/F46.long

Evidence Level: IV

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