Respiratory Distress

COCHRANE SYSTEMATIC REVIEW: Thrombolytic therapy for pulmonary embolism

Implications for practice: Appears effective, but similar effectiveness to heparin

Thrombolytic drugs are used to dissolve blood clots in patients with clinically serious or massive pulmonary embolism (PE). The use of thrombolytic therapies was assessed since concern remains about their side effects. Based on the results of eight trials, thrombolytic agents were not any better than heparin at reducing death or the recurrence of pulmonary embolism. Limited information from only three of the trials showed that thromolytics were better at improving blood flow through the lungs. Major bleeding events were similar with both therapies.

LINK to Cochrane Library: *2006, Issue 2*

http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004437/frame.html

COCHRANE SYSTEMATIC REVIEW:Simple aspiration versus intercostal tube drainage for primary spontaneous pneumothorax in adults

Implications for practice: Effectiveness unknown due to insufficient data

Two approaches, simple aspiration or intercostal tube drainage, can be used to remove air from the pleural space in patients with spontaneous pneumothorax. In reviewing the research comparing these two methods, only one small trial of 60 patients met the inclusion criteria. The results showed that simple aspiration reduced the likelihood of the patient being hospitalized and did not differ from the effects intercostal tube drainage on the other outcomes measured.

LINK to Cochrane Library:*2007, Issue 1*

http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004479/frame.html

COCHRANE SYSTEMATIC REVIEW:Lung protective ventilation strategy for the acute respiratory distress syndrome

Implications for practice: Appears effective in the short term

Critically ill patients affected by severe acute respiratory failure need air to be pumped into their lungs (mechanical ventilation) to survive. Ventilation with lower tidal volume was tested in large trials. This update adds one more trial, but clinical heterogeneity still makes the interpretation of combined results difficult. Mortality is significantly reduced at day 28 and at the end of hospital stay with lung-protective ventilation, but the effects on long-term mortality are unknown.

LINK to Cochrane Library:*2007, Issue 3 – Updated review*

http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD003844/frame.html

COCHRANE SYSTEMATIC REVIEW:Non-invasive positive pressure ventilation (CPAP or bilevel NPPV) for cardiogenic pulmonary edema

Implications for practice: Effectiveness demonstrated, especially CPAP

Acute heart failure may cause the abnormal build up of fluid in the lungs, or pulmonary edema. This review found that using non-invasive positive pressure ventilation (continuous positive airway pressure (CPAP) or bilevel NPPV) plus standard medical care, improved patient outcomes over standard care alone in adults with acute

cardiogenic pulmonary edema. Mortality, endotracheal intubation rate and intensive care unit length of stay was decreased without increasing the risk of heart attack during or after treatment.

LINK to Cochrane Library:*2008, Issue 3*

http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD005351/frame.html