PNEUMOTHORACES IN LATE PRE-TERM AND TERM INFANTS: 50 CASES IN A UK DISTRICT GENERAL HOSPITAL

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Aim

To review the risk factors for pneumothoraces, including a review of the risk factors and indications for chest drain insertion.

Method

Review of babies >32/40 gestation with a pneumothorax between **June 2011** and **March 2018**. Used 'BadgerNet', 'ICE' (results server), 'PACS' (radiology software), 'Windip' (scanned notes software) to obtain information.

Results

Total of **50 babies**, **23 (46%)** of whom required **chest drain** insertion.

All occurred within **72 hours of life**. **74%** were in **boys**.

The **3 main risk factors** for pneumothorax were: **male sex**, **inflation/ventilation breaths at birth** and delivery via **C-section**.

The **indications** for **chest drain insertion** as per regional guidelines were met in **91%** of the babies who had chest drains sited.

Number of risk factors per baby for pneumothorax

250 babies had **CPAP** in this time period and gestation: 14 developed a pneumothorax (**5.6%**). 114 babies received **high flow**, 4 of whom had a pneumothorax (**3.5%**).

Term infants more commonly had pneumothoraces but **preterm infants more commonly required chest drains**.

Respiratory support and chest drain insertion

Risk Factors for pneumothorax

Conclusions

All babies had risk factors for pneumothoraces, most commonly 3.

CPAP was a particular risk factor for significant pneumothoraces requiring chest drain insertion.

Almost half the babies (46%) required chest drain insertion.

Further evidence supporting therapeutic aspiration compared to drain insertion could help decrease drain rates.

References

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