The Hierarchy of Evidence

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

I  Evidence obtained from a systematic review of all relevant randomised control trials.

II Evidence obtained from at least one well designed randomised control trial.

III Evidence obtained from well-designed controlled trials without randomisation.

IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case- series

V Evidence obtained from systematic reviews of descriptive and qualitative studies

VI Evidence obtained from single descriptive and qualitative studies

VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology


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<th>Reference</th>
<th>Evidence level (I-VII)</th>
<th>Key findings, outcomes or recommendations</th>
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• Factors covered: frequency of suctioning, number of practitioners and gloves, size and type of catheters, depth of suction, duration of suction, hypoxaemia during suction, suction pressure, saline installation  
• Above factors related to available research regarding best practice for each factor |
• Discussion includes adverse effects, optimal duration of suction, negative vacuum pressure, depth suction catheter should be passed, necessity of instillation of saline, necessity to pre-oxygenate |
• Factors discussed include complications, frequency, oxygen saturation, mucosal trauma, appropriate vacuum pressure, duration of suction, risk of infection, instillation of saline |
Issues addressed: indications for suction, depth of suction, number of catheter passes, necessity of saline instillation, necessity of chest physiotherapy, ways to minimize hypoxia and desaturation, time required for recovery post suction |
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<th>Author(s)</th>
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<th>Section</th>
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- The decision whether to pre-oxygenate for tracheal suction in preterm ventilated neonates cannot be answered by this review |