



Percussion

Guide to best practice



Southern West Midlands
Neonatal Operational Delivery Network

Percussion should not be used routinely as evidence in the neonatal population is poor.

Before considering percussion please ensure all other avenues for airway clearance are explored, including:

- ▶ Optimising positioning – increase variety and frequency of turns.
- ▶ Encourage kangaroo care where baby stable and able.
- ▶ Ensure best practice suction technique.

Percussion may be helpful in the following situations. Be sure to check contraindications and precautions before proceeding and document all episodes of percussion.

- ▶ Identified presence of secretions, causing compromise – not clearing with suction alone.
 - ▶ Percussion may aid mobilisation of secretions from distal airways to proximal to allow retrieval with suction.
- ▶ Babies (often not intubated) with poor cough/gag/swallow:
 - ▶ E.g. neurological presentation (HIE, congenital neuromuscular diagnoses).
 - ▶ Whilst secretions are likely to be all “upper airway” the risk of recurrent aspiration is high. In this situation regular airway clearance is likely to be valuable +/- percussion.

The following patient groups should be referred immediately to physiotherapy

- ▶ Cystic Fibrosis
- ▶ Primary Ciliary Dyskinesia



SWMNODN Allied Health Professionals

Katyparnell@nhs.net (SLT) sara.clarke1@nhs.net (Dietitian) Emmafoulerton@nhs.net (PT)



Percussion

Guide to best practice

Contraindications

- ▶ Cardiovascular instability
- ▶ Undrained pneumothorax/bullae
- ▶ Pulmonary interstitial emphysema (PIE)
- ▶ Acute pulmonary haemorrhage
- ▶ Metabolic bone disease/fractured ribs
- ▶ Intraventricular haemorrhage (IVH) within 48 hr
- ▶ Extreme prematurity (<1500 g/<26 weeks' gestation) in first week of life
- ▶ Platelet count <50 x 10⁹/L and/or prolonged clotting and/or active bleeding

Precautions

- ▶ Poor skin integrity
- ▶ Platelet count <100 x 10⁹/L
- ▶ Avoid chest drain sites and Broviac lines/proximity of wounds/stomas
- ▶ Effectiveness reduced in chest wall oedema
- ▶ Distended abdomen

Definition of percussion:

Rhythmic patting over chest wall using a palm cup percussor to generate pressure changes, stimulating mucous clearance by ciliary stimulation.

Procedure

- ▶ Stabilise head with one hand at all times.
- ▶ Ensure whole circumference of the percussor makes contact with baby's chest.
- ▶ Use directly onto skin where able.
- ▶ Ideal rate approximately 3/sec.
- ▶ Use short percussion episodes according to baby's stability/tolerance/age - generally maximum of 1–2 min (up to 2–3 min for more robust babies).
- ▶ Address signs of stress by pacing baby or giving time-out/comfort holding.
- ▶ Treat only when clinically indicated and a maximum of 4-hrly, except when an acute deterioration necessitates additional treatments.

If unsure, please seek advice. emmafoulerton@nhs.net

