



Protocol for induced sputum sampling

Induced sputum sampling will be performed by a paediatric physiotherapist

- Induced sputum should be performed after a 2 hour fast.
- Make an initial assessment of the chest. Attach an oxygen saturation monitor and document oxygen saturations, heart rate, respiratory rate. Perform lung function in children older than 7 years old.
- Before the procedure, obtain a cough swab.
- Administer 200mcg salbutamol via metered dose inhaler and spacer to prevent broncho-constriction.
- Use a jet nebuliser attached to wall oxygen at a flow rate of 5 l/min to deliver 8 ml of 7% sterile hypertonic saline for 15 minutes.
- Make an assessment of the chest every 5 minutes.
- After 15 minutes, apply physiotherapy techniques including chest percussion, vibration, shaking, and active cycle breathing.
- Obtain sputum either by expectoration (in children able to cooperate) or by suctioning through the nasopharynx or oropharynx using a sterile, mucus extractor or suction catheter size 6.
- Make a final assessment and document observations, oxygen saturations, and lung function in children over 7 years old.