

RESPIRATORY SYSTEM EXAMINATION

Examination of upper respiratory tract.

① Nose

Deviation of nasal septum

Colour of nasal mucosa

Discharge

Obstruction, congestion

Polyps.

② Paranasal sinus.

Inspection : For erythema & swelling over sinus

Palpation : Frontal, maxillary & ethmoid sinus
for tenderness

③ Oral cavity.

Oral hygiene - caries in teeth
Tonsils.

Posterior pharyngeal wall.

Postnasal dripping

Examination of Chest.

Inspection

1. Shape of chest :

Drooping of shoulders & hollowing: volume loss.

Prominence: Pleural effusion, pneumothorax.

Kyphoscoliosis: long standing volume loss of lung.
retraction

2. Position of trachea

Trills sign: trachea deviated to side where
sternocleidomastoid is prominent

3. Position of apex beat

4. Respiratory movement.

Equal or diminished in the upper or lower part
of chest anteriorly or posteriorly.

5. Respiratory rate.

6. Type of breathing.

Abdominothoracic (male)

thoracoabdominal (female)

7. Dilated veins, pulsations visible, scars, sinuses
or edema of the chest wall.

Palpation.

1. Position of trachea

The examiner's index finger placed as sternocleidomastoid
joint serve as reference point. Palpate tracheal
rings from above downwards with the middle finger

9 look for tracheal shift. Inaugurate three fingers between the trachea and sternomastoid, compare 2 sides

2. Apex beat.

Located by palpating with the palm of the hand first then ulnar border of palm & finally with index finger. Comment on intercostal space, number, distance from midclavicular line.

3. Movements during respiration.

(a) Examination of upper posterior part of chest.

Patient sitting & examiner stands behind & places both hands over patient's shoulders with extended thumbs held vertically & parallel to each other. Compare the upward movement during inspiration.

(b) Examination of lower posterior part of chest.

Examiner should grasp the chest from behind with 2 hands. Bring the tip of the outstretched thumbs together in the region of the 10th thoracic spine ensuring that there is a loose fold of skin between the 2 thumbs. Compare the lateral movement during inspiration.

③ Examination of upper anterior part of chest.

Examiner place both the hands in the infra-clavicular space with thumbs placed horizontally near the midline.

④ Examination of lower anterior part of chest.

Examiner place hands symmetrically on each side of the chest such that the thumbs meet each other horizontally in the midline.

4. Chest expansion

→ at level of nipples.

→ Using an inch tape measure the total expansion.

→ Ask the patient to expire fully & then a deep inspiration & measure the expansion.

5. Vocal Tremor.

Ask the patient to say 'one'.

Place the ulnar border of the hand horizontally in the intercostal space. Palpate simultaneously for variations of the sound by comparing the 2 sides. Palpate anterior & posterior aspect.

Increased → consolidation.

Decreased → effusion & pneumothorax.

Percussion.

→ Anterior chest wall, back & axilla.

→ Interpretation of results

* Tympanic note : drum like note, elicited normally over stomach

* Hyperresonance : in pneumothorax.

* Resonance : Normal

* Impaired resonance : Fibrosis

* Dull : consolidation.

* Stony dull : Pleural effusion, empyema.

Auscultation.

Areas

- | | |
|-------------------|-----------------|
| • Supraclavicular | • Suprascapular |
| • Infraclavicular | • Interscapular |
| • Axillary | • Mammary |
| • Infra axillary | |
| • Infra scapular | |

1. Breath sounds.

- Intensity - Normal & equal bilaterally
- diminished
 - Absent.

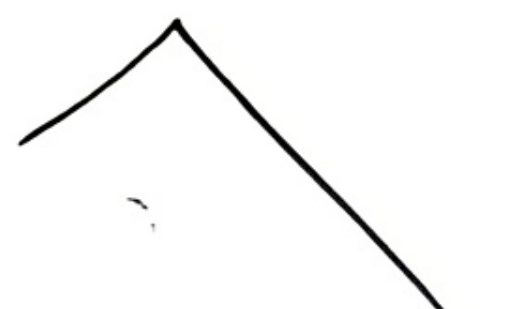
Type of breath sound



vesicular



Bronchial.



Broncho
vesicular

2. Adventitious Sounds - Rhonchi & crepitations (crackles)

3. Vocal Resonance.

Child is auscultated while saying one-one or the nurse, or if crying, in the same order of auscultation and both sides compared. The intensity will be decreased in airway obstruction, collapse, pleural effusion or pneumothorax.

Increased over the area of consolidation, cavity, infarction & collapse consolidation.