

- 5) **Ballottement (rebound)** : This is performed by pushing the body wall sharply and forcefully so that internal structures are first propelled against the body wall then on recoil rebound against the operator's fingers. This enables the presence or character of an internal structure to be assessed.
- 6) **Visual inspection:** This is used to identify abnormalities of conformation, gait, contour and posture. Visual appraisal may help determine the size and character of a lesion.
- 7) **Olfactory inspection:** This is used to identify and characterize abnormal smells which may be associated with disease.

Auscultation

I - Auscultation to the lungs area:

The triangle of auscultation composed of :

- **Anterior line** :Posterior angel of scapula to Olecranon process of ulna.
- **Dorsal line:** Pre- last intercostal space to External angle of ilium.
- **Ventral line** : Olecranon process of ulna to Pre- last intercostal space passing from the 9 ribs in cattle and 11 or 12 in horse.

Normal respiratory sounds أصوات التنفس الطبيعية

⇒ Vesicular breathing is heard only in the caudodorsal third of the thoracic field. it resembles the start of the letter "V".

Abnormal respiratory sounds أصوات التنفس الغير الطبيعية

⇒ Exaggerated or rough vesicular murmur: in case of excitement , pain and the first stages of lung congestion.

⇒ Attenuated vesicular murmur: heard in the second and final stages of pneumonia

⇒ Muffled sound (silent) : (pulmonary oedema, large abscesses, neoplasms, Consolidation).

II- Auscultation of the bronchus:

The normal bronchial sound like the CH sound and can be heard in the area of the larynx and trachea and the front part of the second third of the triangle which used to

hear the lung in small animals and thinner large animals or in a normal large animal is less obvious.

Abnormal respiratory sounds

Such sounds Produce for diseases of the bronchi or lungs or the pleura or diaphragm . it includes:

1.**Rales:** the voices that indicate the presence of fluids or secretions in the bronchial airways or bronchioles, and depending on the Viscosity of secretions >

It divided into:

A. **Moist rales** are heard when the bronchi contain watery secretion or exudation (pulmonary oedema, catarrhal bronchopneumonia or aspiration pneumonia). It resembles simmering, the whipping up of froth .

B. **Dry rales** are heard when the exudates thicken up to form thick mucus, resulting in elongated projections into the bronchial lumen and vibrate in air currents, producing dry rales.

2. Emphysematous sound: It is a rough sound heard during inspiration and lesser at the expiration is similar to what caused this sound crimp paper by hand. It occurs in the case of sound emphysematosa

3. Crepitation: due to small-bubbled foam, occurs during pulmonary emphysema

4. Friction sounds - Movement of parts of the pleura with pericardium against each other produces friction sounds.

-Sounds may be heard during auscultation, and it is important not to confuse them with normal and abnormal breathing sounds:

أصوات قد تتداخل مع أصوات التنفس

- Muscular tremor (which shakes the chest piece of the phonendoscope).
- Hair rustling (press the phonendoscope more firmly).
- Tooth grinding, swallowing, eructation and cud regurgitation.

- Grinding chewing (rumination), contractions of the forestomachs and painful moaning.
- Unilateral absence of breathing sounds may be due to pneumo-thorax.

III- Auscultation of the heart:

The stethoscope is used to hear the heart sound when applied on left last third of the triangle of the lungs, especially in the fourth and fifth space between the ribs. The fundamental objectives of the auscultation to the heart are:

1. Heart rate
2. Rhythm
3. Intensity and quality
4. Abnormal sounds