

TRAUMATIC RETICULOPERITONITIS



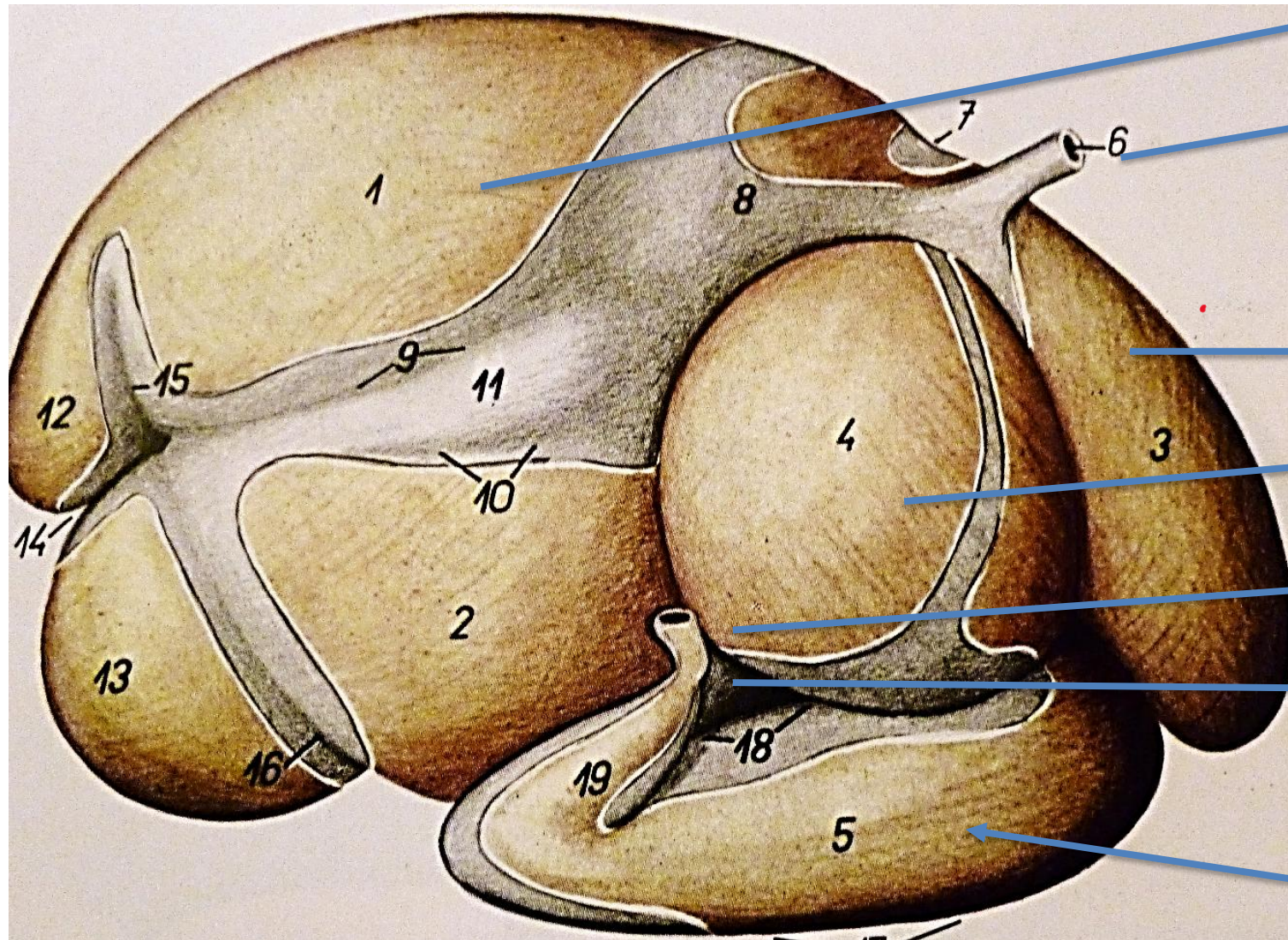
DAHMANI ALI .

**METREF KHEIREDDINE AHMED
ISV DE BLIDA**

**Livestock (ruminants 1 Cours de 4eme
year, 2025-2026**

Photo @ Dahmani Ali

ANATOMY OF THE BOVINE RUMEN/ right side view



• Dorsal lobe of the rumen

Esophagus (cardia)

réseau

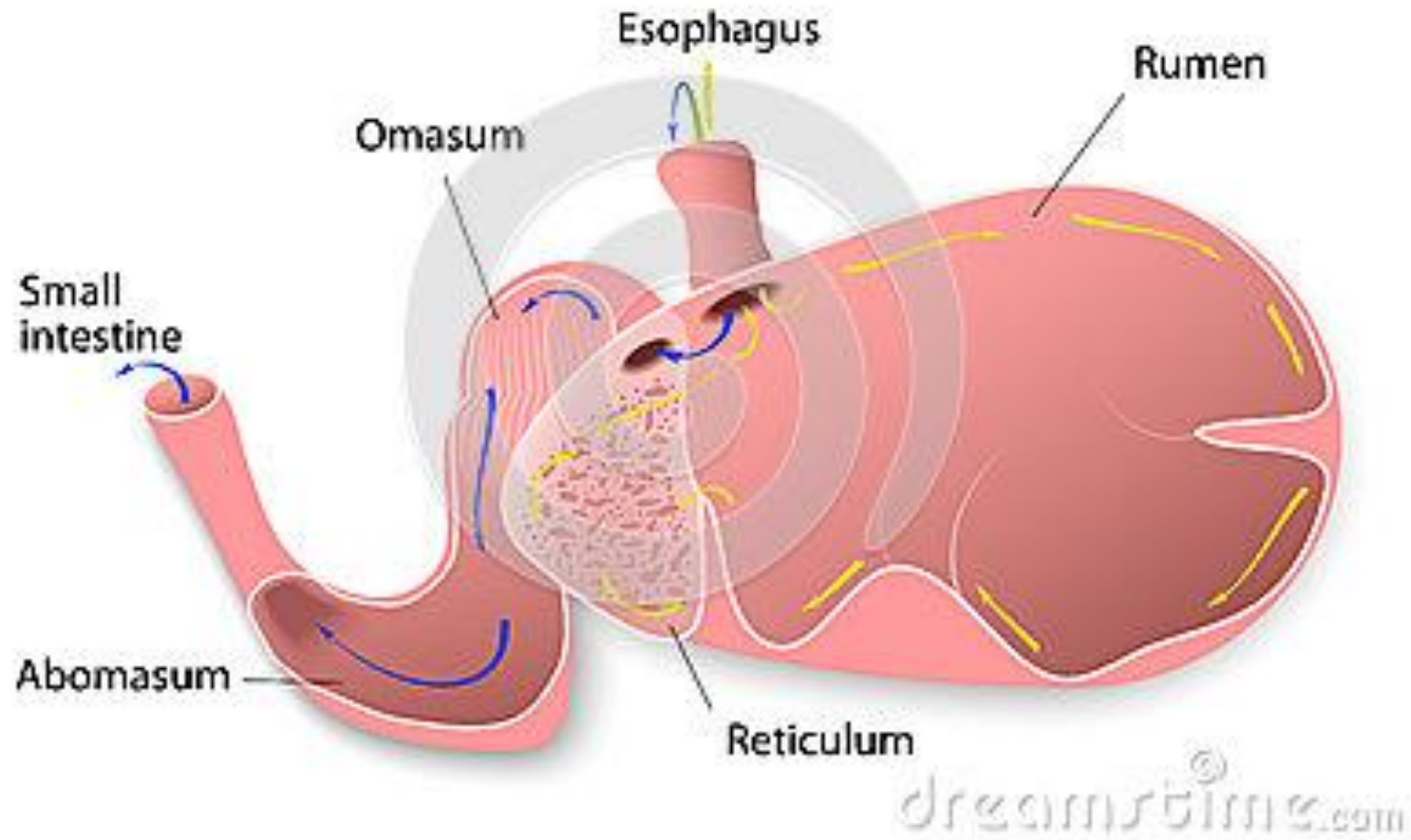
feuillet

pylorus

Sphincter pylorique

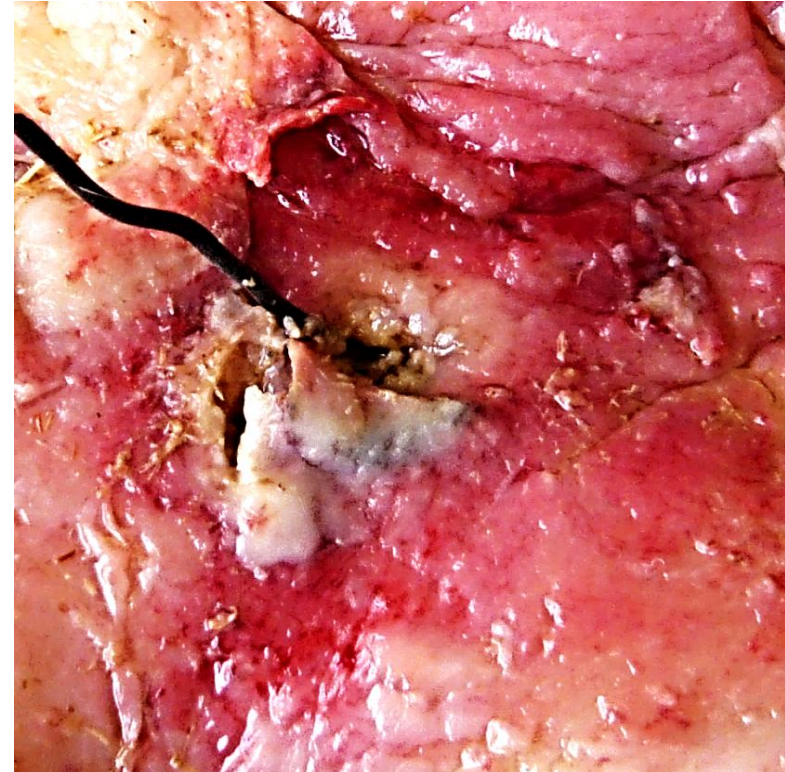
Abomasum

RUMINANT STOMACH



Definition of a foreign body

- It's a body
- Indigestible
- Sharp, or often metallic,
- It can be
 - A wire
 - A needle
 - A knife blade
 - A nail
 - And others

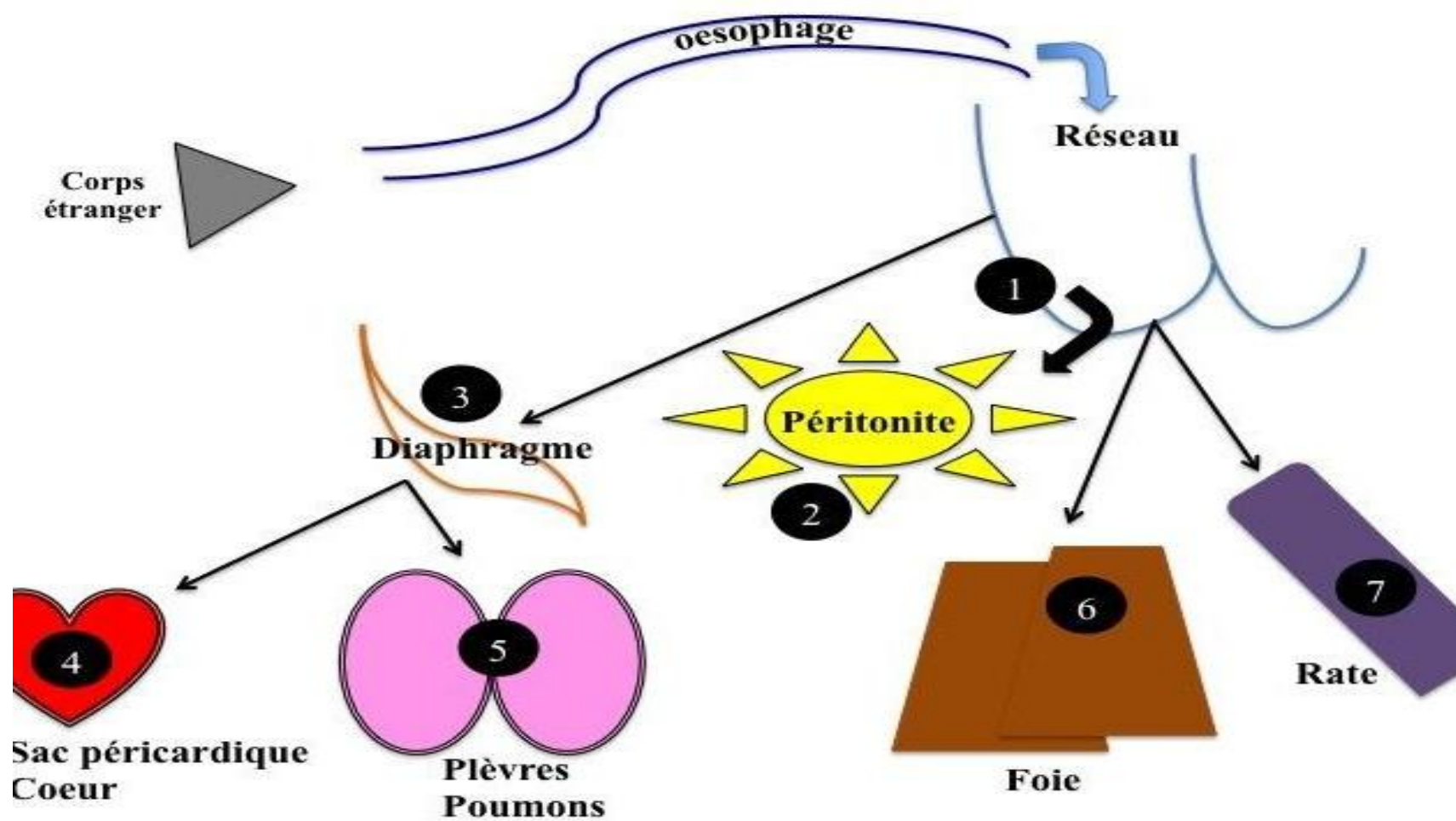


*Inflamed visceral wall of a perforated cattle
by a wire (photo Dahmani Ali)*



Dahmani Ali

Metallic traumatic foreign body: In straw distributed



Schematic representation of the internal fate of an ingested metallic foreign body

fréquence et circonstances d'atteinte

- Involvement of cattle is more common than other animals.
- on cattle frequenting public dumps.
- On cows more than bulls
- Dairy cows more than suckler cows.
- On good dairy producers.
- In urban areas than in rural areas.



Cattle frequenting uncontrolled public dumps (1). Indigestible matter cluttering the rumen, found at the slaughter station (2),(Photos Dahmani Ali)



Cattle more frequently affected than other animals

Animals frequenting public charls

On cows more than bulls

dairy cows more than suckler cows

Good dairy farmers

urban areas than in rural areas



Symptoms

In the early stages:

Stopping food intake

Rumen atony (pain)

Mild hyperthermia (39.5°C)

Elbow Spacing

Arched back

Fall in milk production

Tachycardia

Tremor of the muscles



écartement des coudes pour soulager la douleur provoquée par la migration du corps étranger (photos Dahmani Ali)



To refine our suspicion:

we operate by different tests

- Tourniquet test
- Baton test
- Inclined plane test



Arched back in a suspicious cow (photo Dahmani Ali)

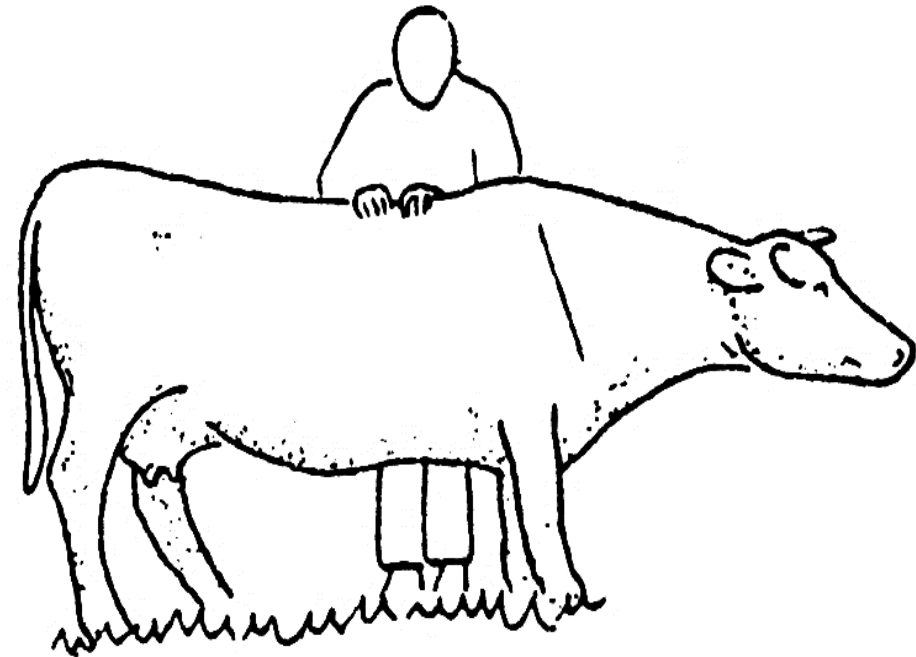
Tourniquet test

Pinch at the withers (spinous processes)

In its natural state, the animal flexes its back

If the animal resists: (+)

RPT is suspected



Epreuve du garrot : pincer les apophyses épineuses du bovin

Epreuve du bâton

Two helpers slowly but vigorously lift a stick held across the animal

In the zyphoid region (behind the tip of the elbow at the umbilicus)

then suddenly release him

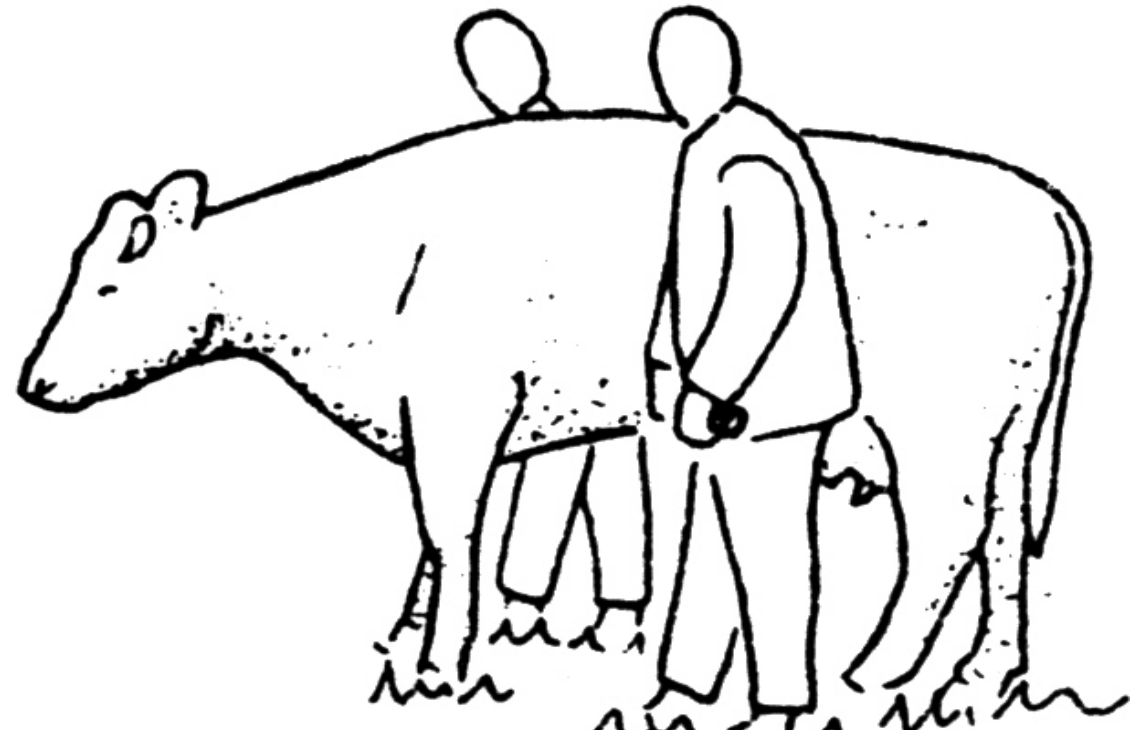
If we notice:

discomfort

complaints

moans:

RPT is suspected



Inclined plane test

- The suspect animal is made to walk on a slope:
- If the animal has:
 - difficulties,
 - a resistance to move.
 - from complaints to travel,
 - while it moves easily uphill:
- So the foreign body is suspected

Symptômes

En phase finale

- The animal withers away
- Difficulty of putting to bed and raising
- Anaemia
- Edema of the baleen
- Turgidity of the jugular vein.
- retrograde venous pulse
- Auscultation:
 - Bradycardia
 - Flood noise
 - Distant heart; not audible



Clinical sign: oedema of the chest (dewlap)

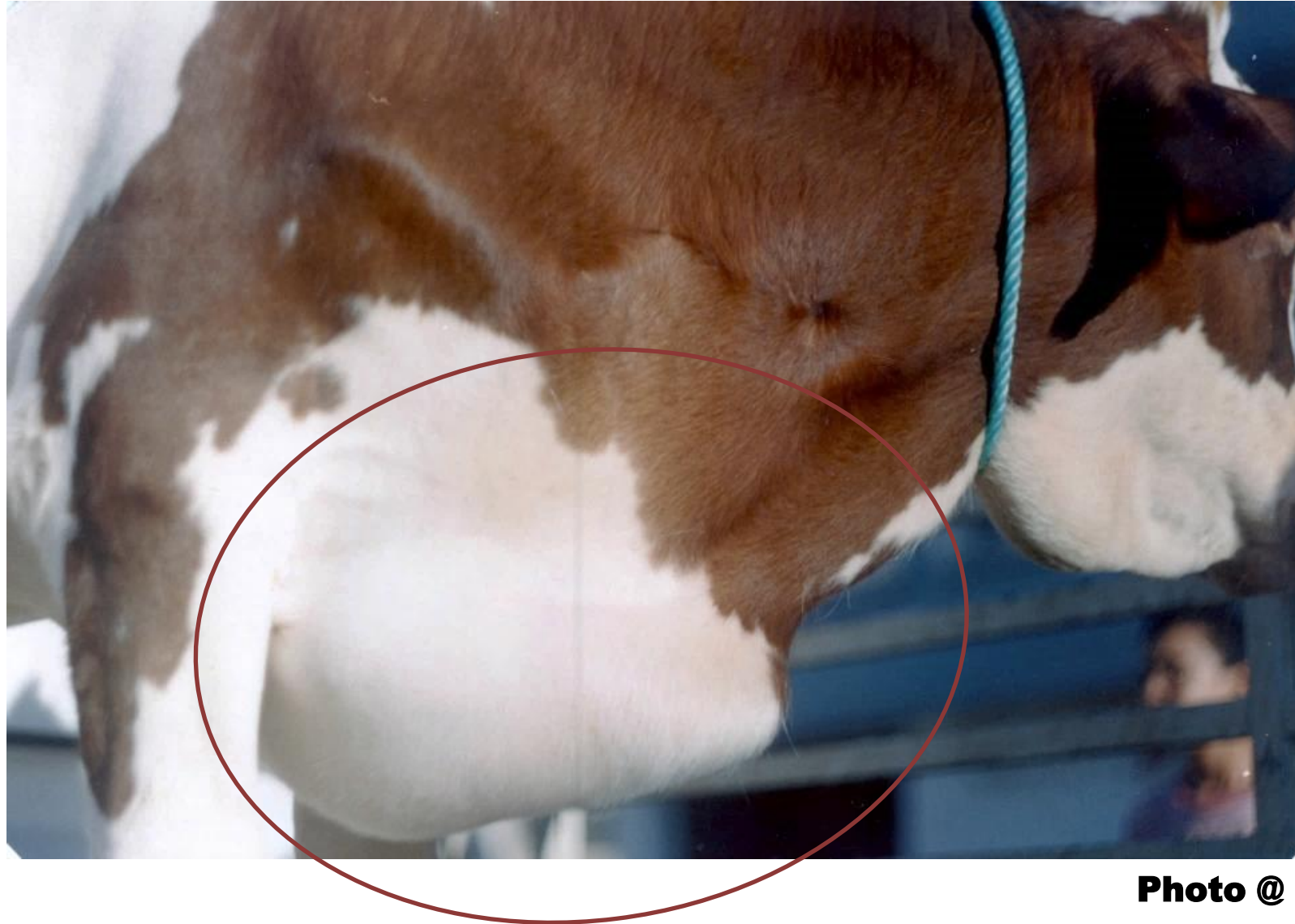


Photo @ Dahmani Ali

A metal detector is used

Benefits

- Dc fast



Disadvantages

- Detects only ferrous objects
- Sounds even if they are not piercing

AT THE AUTOPSY (SLAUGHTERHOUSE)

I' 'Honeycomb' appearance of reticular cells is a factor in the retention of sharpened iron bodies



Wheel spoke of a bicycle stuck in the cells (photo Dahmani Ali)



Dahmani Ali

Inflammation serosa, (RPT) (photo Dahmani Ali)

Lesions of the Heart in Pericarditis

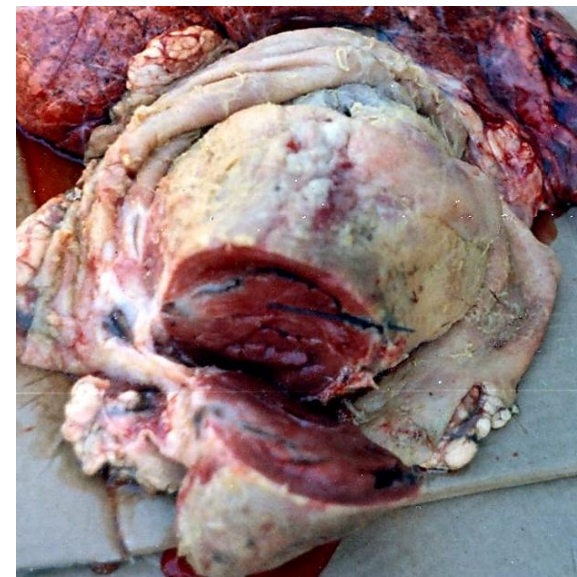
The pericardium is a visceral pleura that is normally thin and translucent (transparent).

The entry of germs causes dry inflammation = rubbing noises are heard during the clinical examination with a stethoscope (1st phase)

Wet = then a liquid exudate forms Clear then yellowish = flow noise with a stethoscope

In the final phase, the inflammatory fluid becomes

Thick, opaque, purulent With fibrin formation and adhesions to the myocardium, on auscultation the heart is less audible; the sound is far away(



Péricardite avec formation de fibrine sur un cœur traversé par une aiguille (photos Dahmani Ali)

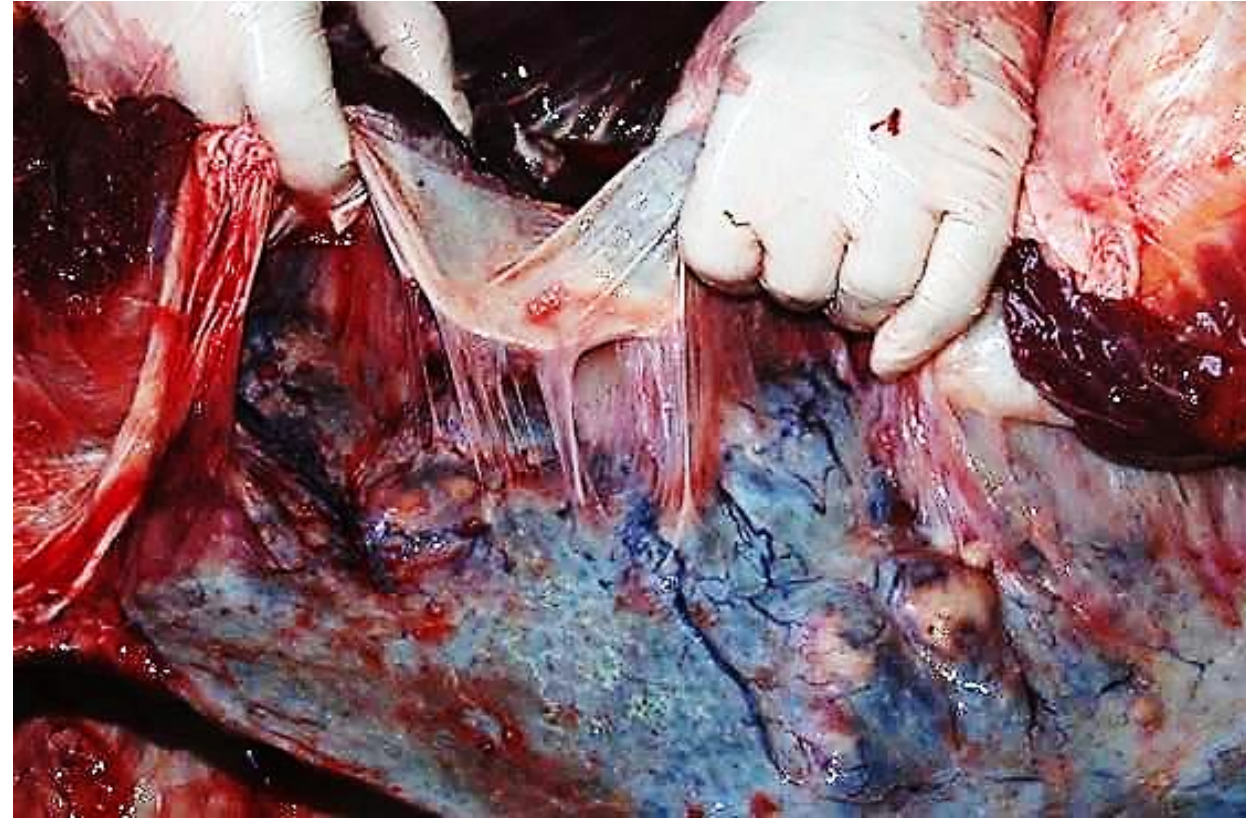


The visceral surface of the liver contains fibrin flames resulting from adhesion to the wall of the network.

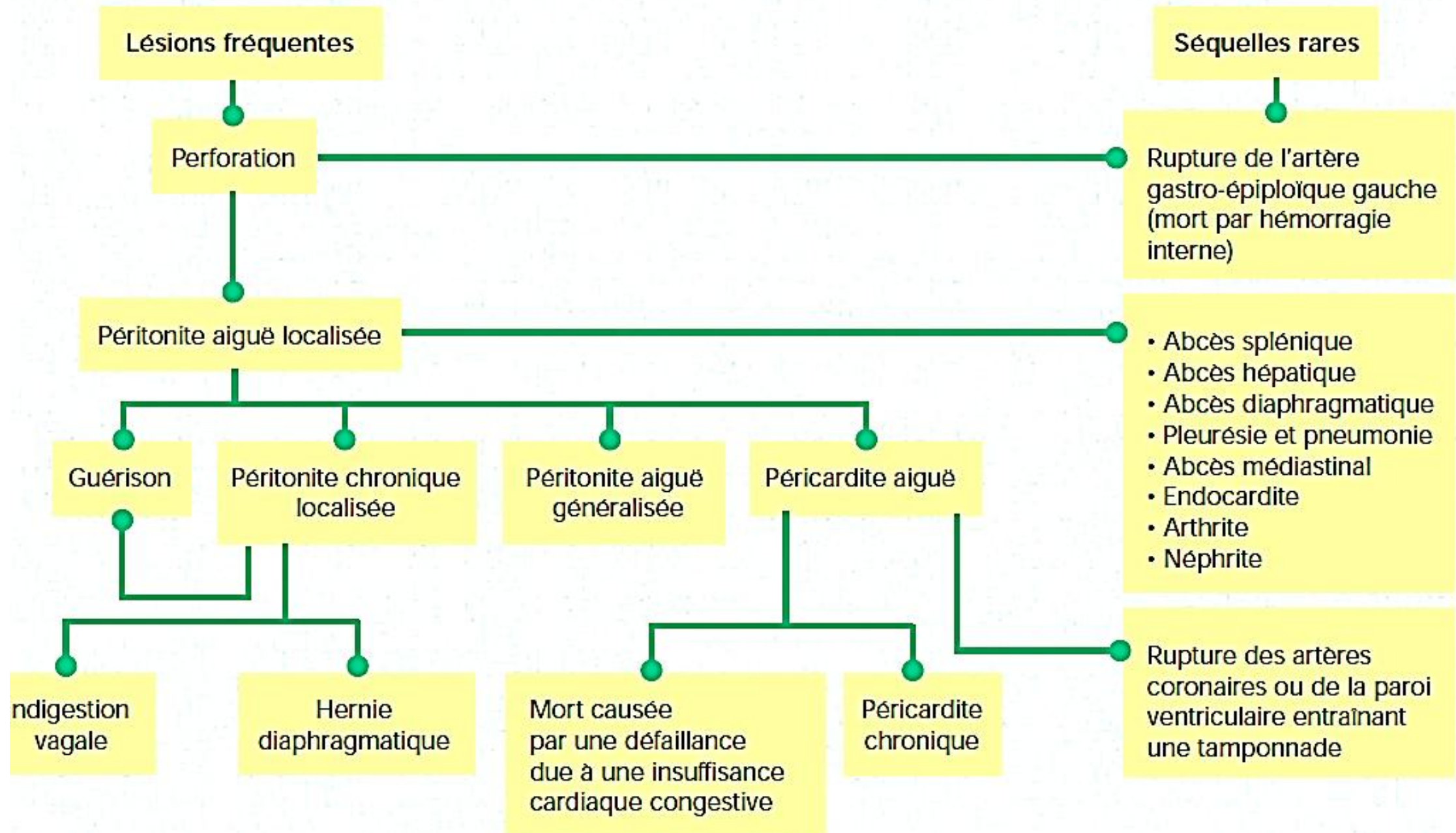
consequence of perihepatitis due to the migration of a traumatic foreign body from the network to the right cranial abdominal cavity.



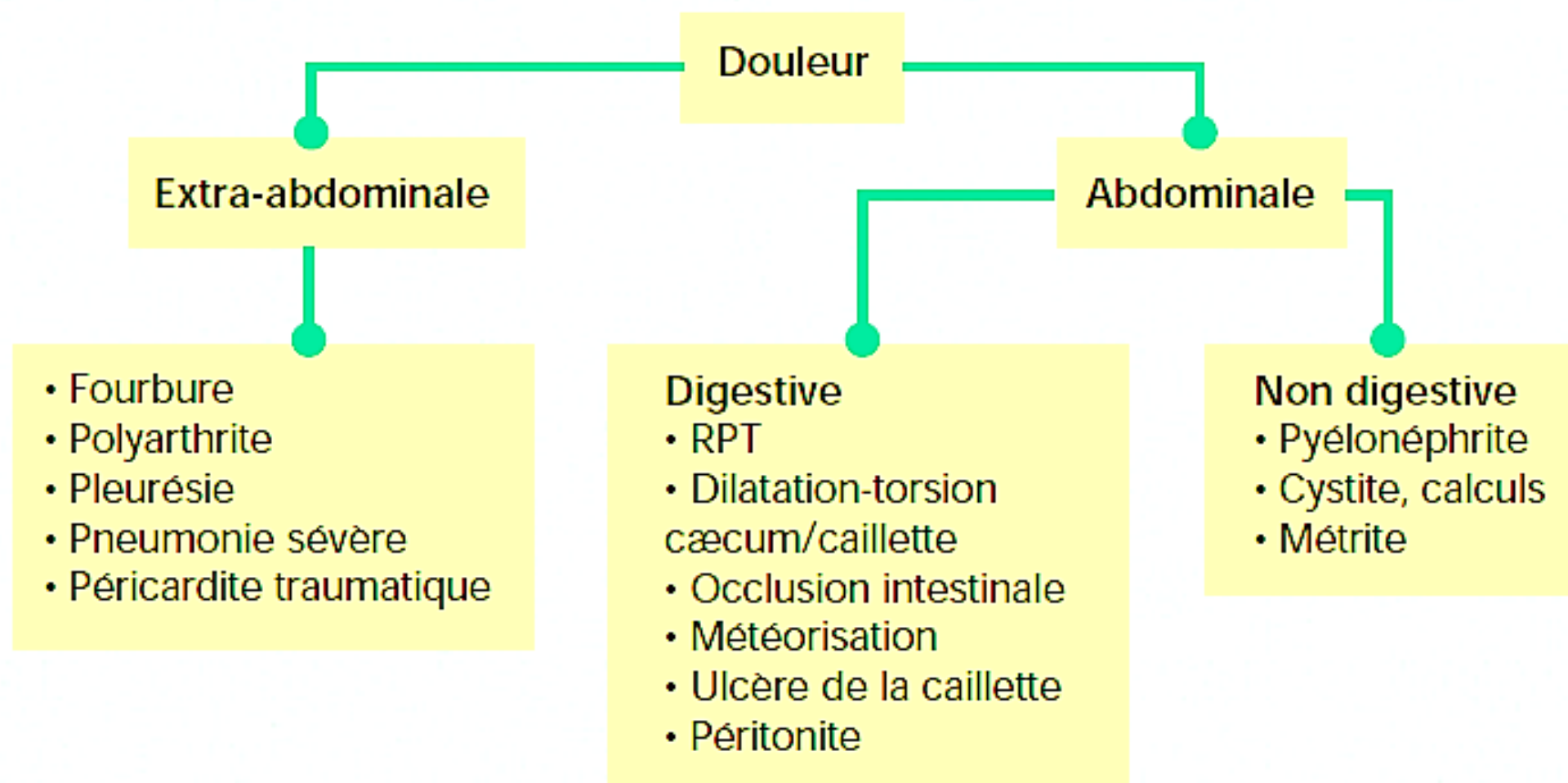
The visceral aspect of the spleen has fibrous adhesions to the rumen wall following peritonitis due to the migration of a traumatic foreign body.



Lésions et séquelles liées à une perforation traumatique de la paroi du réseau



Affections douloureuses incluses dans le diagnostic différentiel de la RPT aiguë des bovins



La présence d'une douleur en région abdominale peut avoir de multiples causes.
D'après G. Fecteau.

Traitement

- **Cattle that receive treatment are those detected very early:**
- **from the 1st signs of the disease,**
- **Fall in Dairy Production**
- **Arched back**
- **Positive inclined plane and tourniquet test**
- **Tachycardia**

- **Antibiotic therapy from 5 to 8 days**
- **Place the animal on an inclined plane with the front raised**
- **Make the animal swallow a magnet**



Photo @ Dahmani Ali

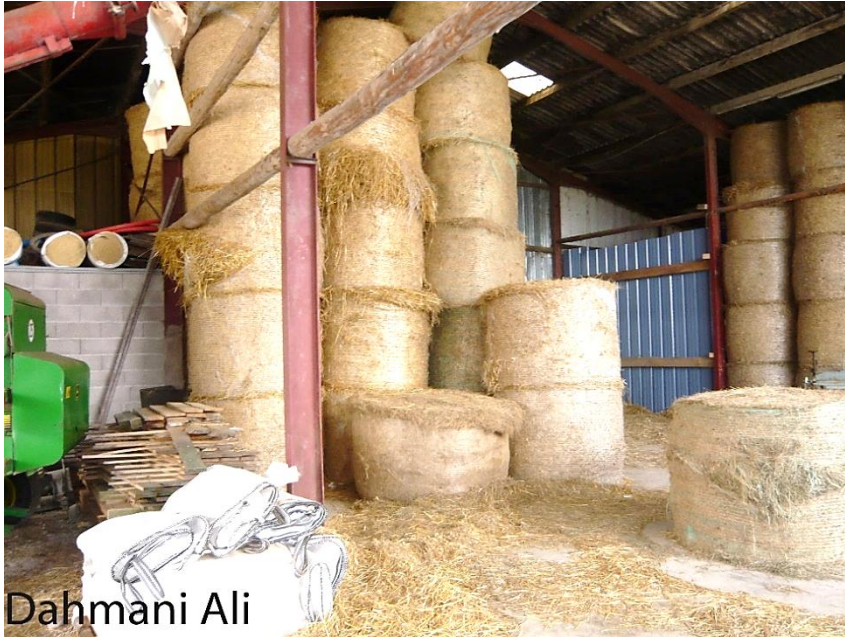
Prevention: Administering a magnet as a preventive measure is less expensive than treatment



Photo @ Dahmani Ali

Administration of a magnet to all breeding cattle, makes it possible to capture the majority of ferrous foreign bodies

Replace the baler system.
Ban the use of iron wire in balers



Rolled clods protected by plastic film
(Photo Dahmani Ali)



Bundler (photo Dahmani Ali)

THANK YOU