

***Postmortal  
hypostatic  
congestion***

Hypostatic congestion is the pooling of blood in capillaries and veins in a dependent part due to the effect of gravity.

It is formed 1-2 hours after death and becomes stable after 12 hours.

It is best determined at the bottom of double organs such as lungs and kidneys.

**HYPOSTATIC CONGESTION** is present in the lobes at the bottom of the visual. This side of the animal was ventral for a period of time before (or after) death.

Remember this lesion may occur in organs after death since the blood pools rapidly before clotting occurs

This gravitational settling of blood and body fluids results in a darker reddish coloration of the organs and tissues on the down side of the cadaver.

The settling of blood to the down side of the animal body. Gravitational force causes this to happen. This gravitational settling of blood and body fluids results to intense reddish coloration of the organs and tissues at the down side of the cadaver.

# **Organs with postmortal hypostatic congestion:**

- **Increase in volume**
- **Intense reddish coloration of the  
organs and tissues**
- **The blood exudes from the section.**

# What is the importance?

- **Forensic investigations show the side where the cadaver lay died.**
- **It can be interferes with Passive hyperemia (intravital passive congestion, hypostatic congestion) and active hyperemia (active congestion).**

# Otherwise;

*The pale, defective - whitish-yellowish anemia, icterus, necrosis, degeneration (oily, parenchymal degeneration), which are shaped in the same region, make it difficult to differentiate pathological color changes.*

# Severity :

- ❑ The animals that have been in operation and agonia for a long time,
- ❑ Animals that died animals from septicemia and intoxication,
- ❑ Animals that have right heart failure,

➔ more higher

Livores-  
Livor mortis

Livor mortis is **the purple-red discoloration** of the soft tissues due to postmortem gravity-dependent pooling of blood.

Livor mortis typically develops within 30 minutes to 2 hours after death.

It may be observed either externally in the skin and mucous membranes or internally in the abdominal or thoracic viscera, most notably the lung.

*Appearance :*

It has purplish (blue red) spots.

It disappears when you press a finger. but when the pressure is removed, it gets old.

Livor mortis must be distinguished from intravital hemorrhage.

**Although readily visible on human skin, lividity may not be prominent on the skin of many animals even after shaving the hair.**

**Skin of hairy and pigmented in animals prevents to see it.**

**The most obvious is seen in human cadavers and pink swines.**

This pig has livor mortis - see the blue discoloration most visible along the mammary glands.

The pig died while lying on its left side (the side up in this visual).

How do you explain the pattern on this pig's side?

Yes, this is another example of livor mortis - note there are white areas which were in contact with a rigid surface that prevented gravitational filling with blood. Many of these areas are bony prominences (elbow, shoulder, jaw).

This is the carcass of an aborted lamb. Is this an example of livor mortis?

# Severity:

It depends on the ambient temperature, time and disease.

## Light colored skin:

- Cyanide and CO intoxication
- The cadaver in cold environment
- Freezing and drowning

## Dirty, brown-colored skin:

Poisonings such as potassium chlorate leading to methemoglobin formation

WABBITION

***Imbibitio sanguis***

***(hemoglobin  
imbibisyon)***

***Hemoglobin imbibition is the pinkish to reddish coloration imparted to tissues due to the lysis of red blood cells.***

**It starts 12 hours after death;  
It reaches its highest level after 30-36  
hours.**

**It is most evident on the outer surfaces of light-colored organs like the omentum, intestine or brain, or on the inner surfaces of large arteries or in the heart.**

In shock and hemolytic disease  
(especially in septicemia) is evident.

This is sometimes most evident on  
the surfaces of large arteries.

It may be confused with old  
hemorrhagic spots, hypostasis and  
sometimes with inflammatory active  
hyperemia.

# Generalized imbibition

All tissue and tissue fluids are stained with hemoglobin and the cadaver has a reddish color.

At neonatal or adult is not seen.

It is formed only in the dead fetus.

It shows the fetus is intrauterine dead

before a few days !

# What is the difference from hypostasis?

- Imbibition has not erythrocyte but hemoglobin.
- Imbibition is on and out of the vessel wall (endothelium layer).
- Color cannot be removed by finger pressing the imbibition zones.

# Bile imbibition

**Bile imbibition is the greenish-yellow coloration imparted to tissues in contact with the gallbladder after death.**

**This is usually seen on the surrounding liver tissue, as well as on loops of gut.**