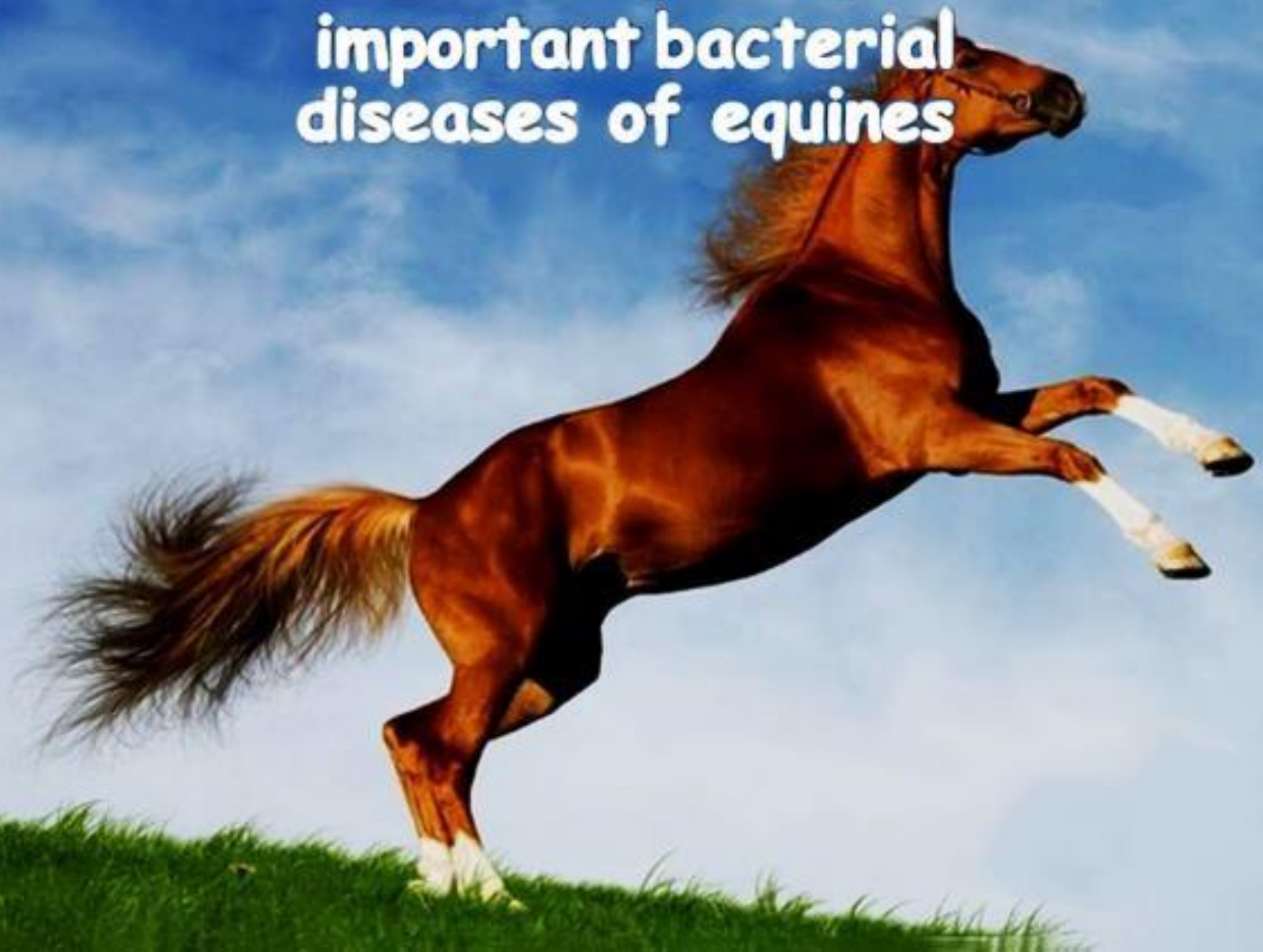


Pathology and pathogenesis of important bacterial diseases of equines



Omphalophlebitis

)Navel ill(



Definition

It is an inflammation of the umbilical vein that often occurs in neonatal farm animals most common in neonatal foals, but can be seen in older foals and has been reported to have occurred in horses up to 16 months of age.

Etiology

bacterial contamination of the umbilicus immediately after parturition associated with poor hygiene in the foaling environment

Symptoms

These foals are often febrile, depressed, have a poor or absent suckle. As the infection spreads, signs specific to the organ system(s) affected will occur: septic arthritis, pneumonia, osteomyelitis

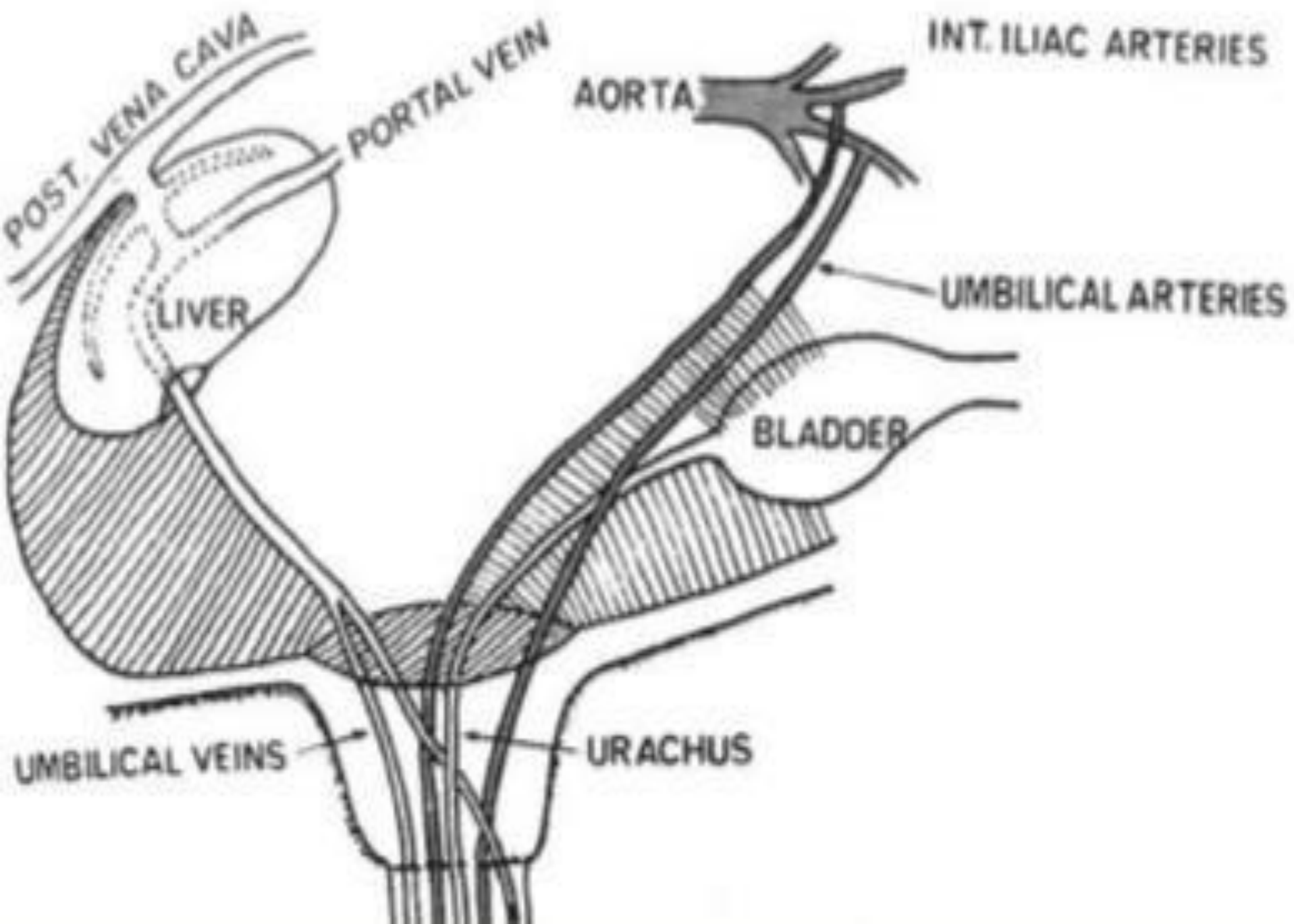
Pathogenesis

The umbilicus is actually made of four structures: two arteries, the umbilical vein, and the urachus

The umbilicus is one of the possible bacterial entries in the neonatal foal

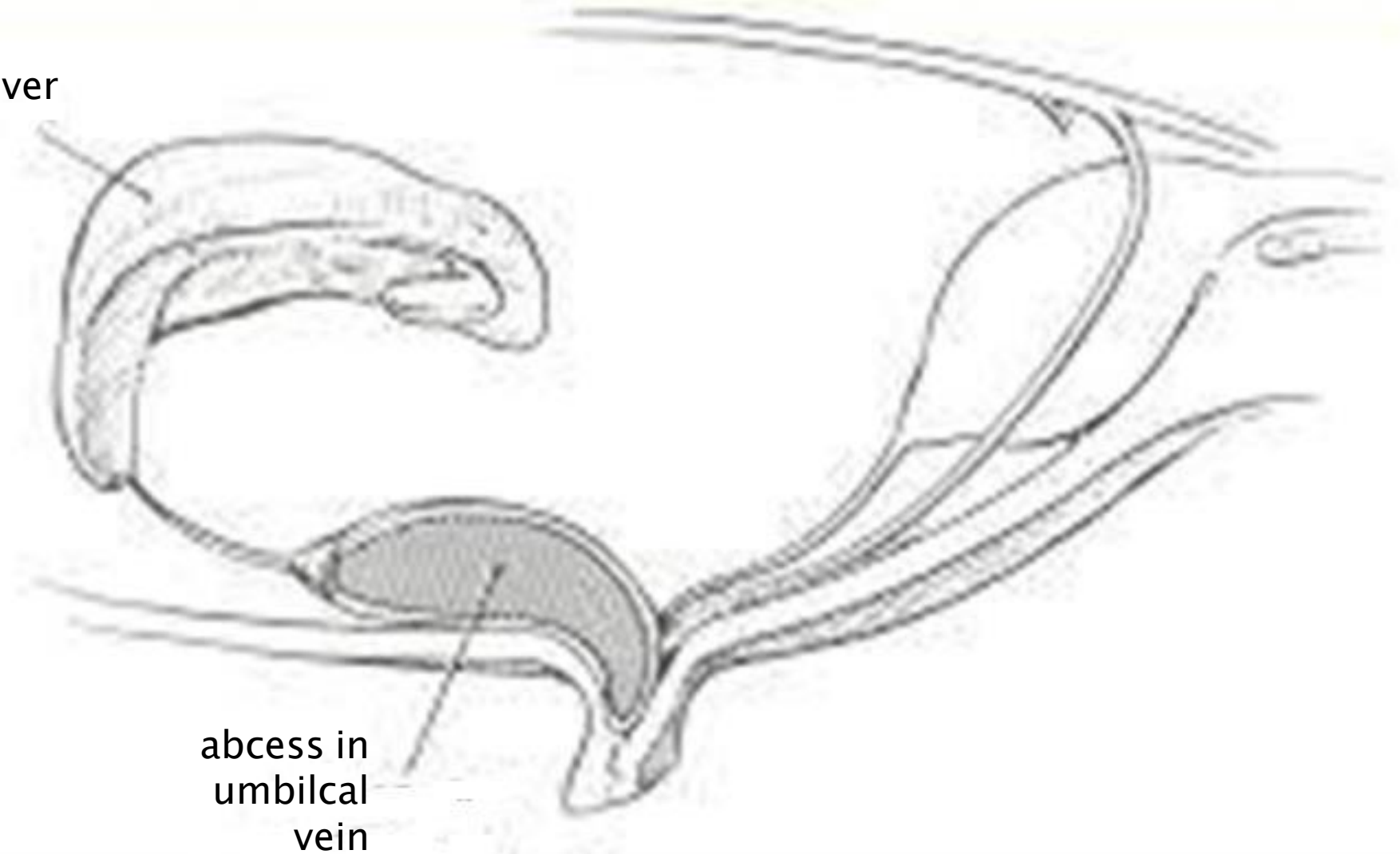
Bacteria colonize the umbilical structures inflammation and abscessation

Bacteria from this site can cause septicemia, suppurative polyarthritits, hepatic abscesses (the umbilical vein drains into the liver), and umbilical abscesses



Umbilical vein infection

liver



abscess in
umbilical
vein

Macroscopical picture

-1 Enlarged umbilicus with possible purulent discharge.

hepatic abscesses -2



Pneumonia, septic arthritis as a result of -3
dissemination of infection

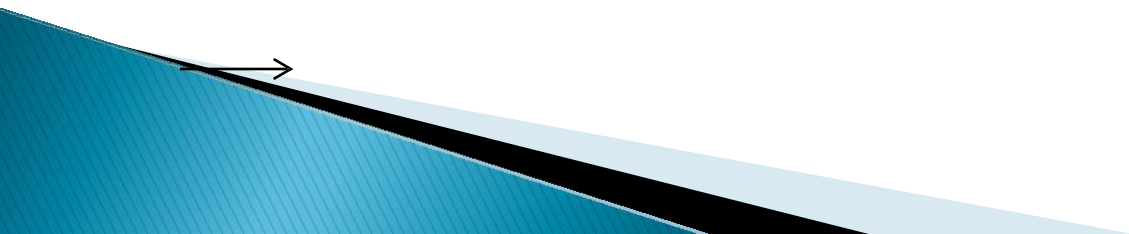
Microscopical picture

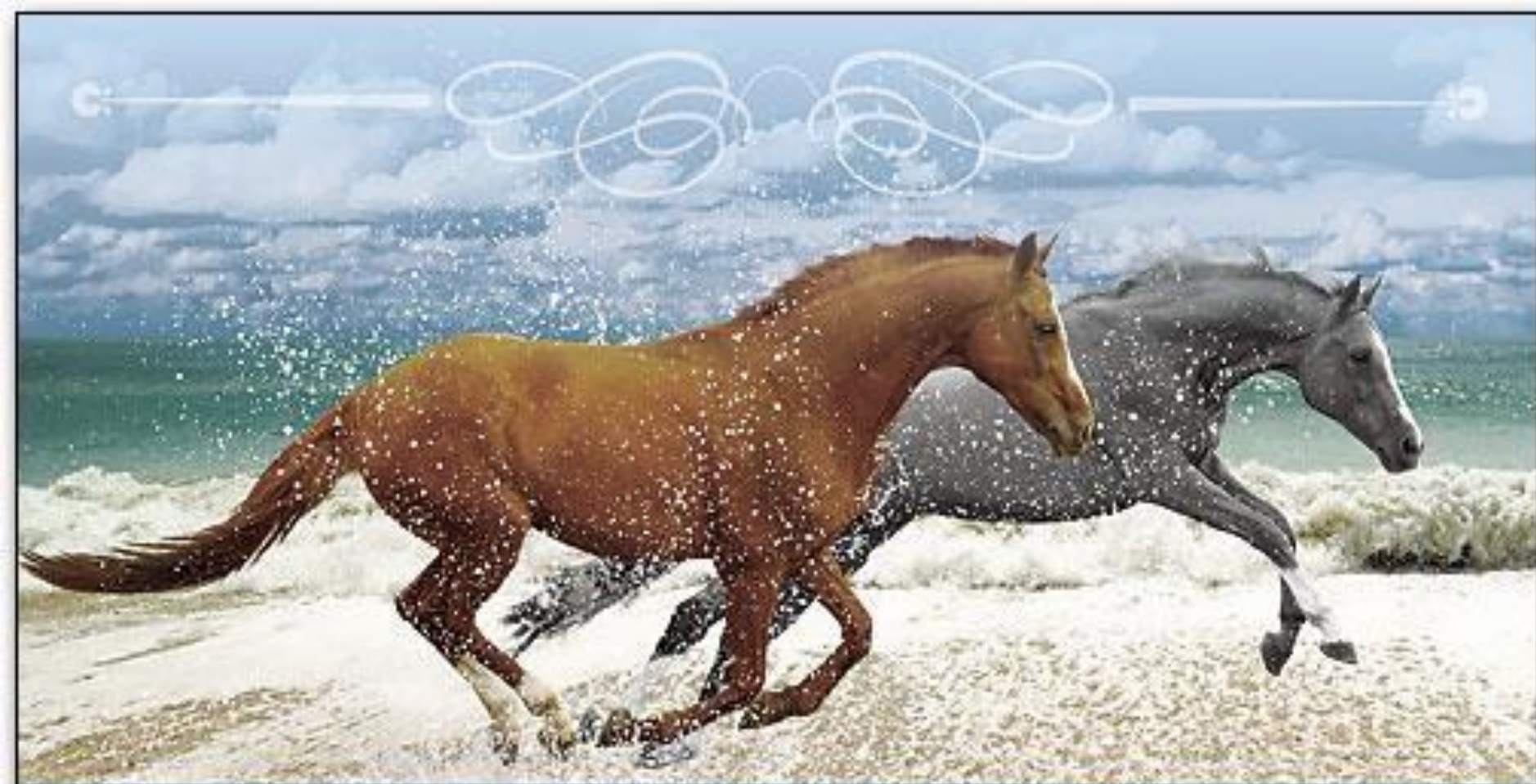
Neutrophilic leukocytes tend to dominate the inflamed vein and, with chronicity, inflammatory fibrous tissue surrounds the vein.

It is frequently accompanied by thrombosis

liver in abscess multiple of presence-3
..... characterized by

joints , lung to spread infection if -4
..... showed





Thank You