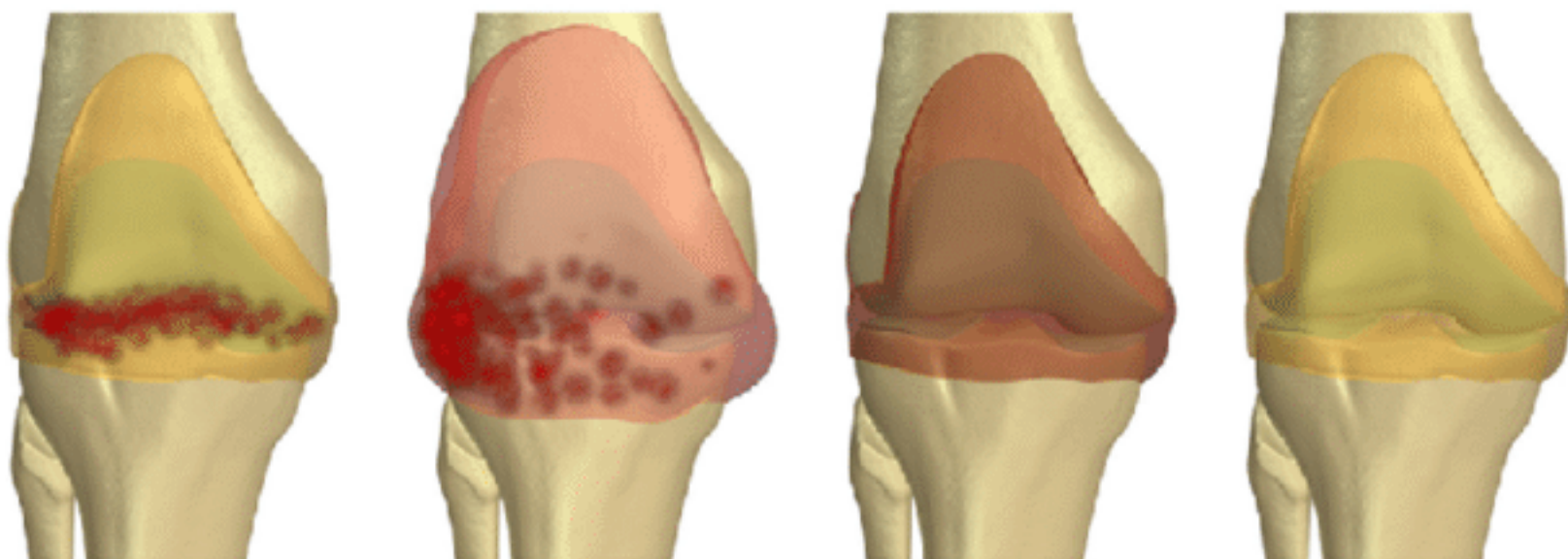


(a)



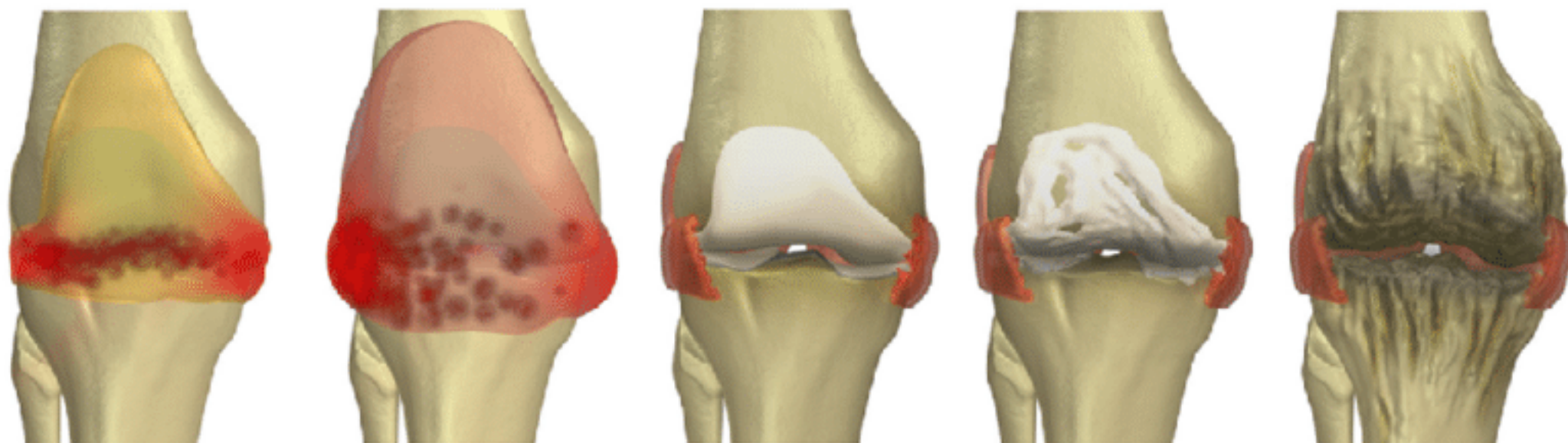
Bleeding starts within the joint

As blood accumulates in the joint, it swells, becomes warm to the touch and may be painful. Appropriate treatment at this stage will stop further bleeding into the joint

The synovium breaks down the blood and absorbs from the joint

After about a week, all the blood is absorbed and the joint returns to its pre-bleed state

(b)



A single bleeding event may be sufficient to provoke inflammation (synovitis)

Recurrent bleeding leads to swelling of the joint and ongoing synovitis

Growth of the joint lining (synovium) leads to an inflamed, vascular and fragile tissue that is more likely to bleed. Further bleeds can destroy the cartilage

Destruction of cartilage leads to long-lasting joint damage, resulting in arthritis and stiffened joints

In later stages, there is complete loss of cartilage and the bone may become deformed, changing the shape of the joint