Hyaluronic acid (HA)



Hyaluronic acid (HA) is a naturally occurring substance found in the synovial fluid of joints, where it acts as a lubricant and shock absorber. In healthy joints, Hyaluronic acid binds to water, creating a gel-like substance that reduces friction between cartilage surfaces, allowing bones to move smoothly over each other. This viscous fluid also acts as a shock absorber, cushioning the joint during movement.

In osteoarthritis, the production of Hyaluronic acid decreases, leading to joint pain, stiffness, and reduced mobility. Hyaluronic acid injections, known as viscosupplementation, are a clinical treatment option that can help alleviate these symptoms by replenishing the Hyaluronic acid levels in the affected joints.

When injected into the joint, Hyaluronic acid enhances lubrication, reduces friction, and improves the quality of synovial fluid, which can help alleviate pain and improve joint function. It also interacts with nerve endings to mitigate pain signals and promotes cartilage health.

Hyaluronic acid injections are particularly beneficial for patients who do not respond well to painkillers or other treatments. When compared to steroid injection, Hyaluronic acid provides greater improvement to quality of life, provides quicker and longer-lasting pain relief for up to 6 months and has less side effects. Unlike steroid injections, hyaluronic acid does not delay any potential surgery and does not have any known interactions with medical conditions or medications.