

### **What is synovitis/tenosynovitis?**

Synovitis is a common condition meaning inflammation of the synovial lining of a joint or tendon sheath (the tunnel the tendon runs through). Tendon sheath synovitis is referred to as tenosynovitis. It is a generalised response of that particular tissue (the synovial lining) to a local problem e.g. injury or infection. It also occurs on occasion as a body wide (systemic) response such as in rheumatoid arthritis (see information sheet) or associated with various diseases such as some infections e.g. Reiter's disease, and some bowel conditions e.g. Crohn's disease. The body wide synovitis will not be considered further as it is typically treated by a Rheumatology specialist (see information sheet).

The synovitis typically affects either a joints or a tendon sheath, although commonly both are affected together.

Tendon sheath: The symptoms again are typically pain or swelling often together but one may predominate. They tend again to give stiffness and reduced function.



*Wrist synovitis from Rhumatoid arthritis*

### **Why does it occur?**

The pathology i.e. the abnormality is swelling of the lining of the joint or tendon sheath with further thickening due to multiplication of the local cells. They in turn produce inflammatory fluid leading to further swelling which may be diffuse or discrete such as a ganglion (see information sheet). Often there is an obvious initiating cause such as an injury but many patients develop symptoms for no obvious cause, probably due to the wear and tear of life. The response of the synovial cells is designed to deal with the underlying problem such as injury or infection. Often this works and the hand settles after a period of pain stiffness and swelling. Sometimes the synovitis persists and can perpetuate itself by causing damage to the local tissues by the chemicals produced in the inflammatory fluid.