REITER'S SYNDROME

Reiter's syndrome also known as reactive arthritis (Re A) is a form of inflammatory arthritis that affects the joints, eyes, urethra, and skin. It is also described as the classic triad of conjunctivitis, urethritis, and arthritis occurring after an infection particularly those in the urogenital or gastrointestinal tract. However majority of patient do not present the classic triad.

EPIDEMIOLOGY:

Reactive arthritis is relatively rare and the incidence in population-based studies is reported to be 0.6 to 27 per 100,000. Reactive arthritis is more common in adult males in the second and third decades of their life.

SYMPTOMS:

The signs and symptoms of reactive arthritis generally start 1 to 4 weeks after exposure to a triggering infection. They might include:

Pain and stiffness: The joint pain associated with reactive arthritis most commonly occurs in the knees, ankles and feet. Pain may also occur in the heels, low back or buttocks.

Eye inflammation: Many people who have reactive arthritis also develop eye inflammation (conjunctivitis).

Urinary problems: Increased frequency and discomfort during urination may occur as there may be inflammation of the prostate gland or cervix.

Enthesitis: Inflammation of tendons and ligaments where they attach to bone. This happens most often in the heels and the sole of the feet.

Swollen toes or fingers: In some cases, toes or fingers might become so swollen that they look like sausages.

Skin problems: Reactive arthritis can affect skin in a variety of ways including mouth sores and a rash on the soles of the feet and palms of the hands.

Low back pain: The pain tends to be worse at night or in the morning.

CAUSES:

Reactive arthritis develops in reaction to an infection in your body often in your intestines, genitals or urinary tract. You might not be aware of the triggering infection if it causes mild symptoms or not at all.

The most common ones include:

- Chlamydia
- Salmonella
- Shigella
- Yersinia
- Campylobacter
- Clostridium difficile

Reactive arthritis isn't contagious. However, the bacteria that cause it can be transmitted sexually or in contaminated food. Only a few of the people who are exposed to these bacteria develop reactive arthritis.

DIAGNOSIS: It includes:

Erythrocyte sedimentation rate (ESR or sed rate): This test looks at how quickly red blood cells fall to the bottom of a test tube. When swelling and inflammation are present, the blood's proteins clump together and become heavier than normal. They fall and settle faster at the bottom of the test tube. The faster the blood cells fall, the more severe the inflammation.

Tests for infections: This includes a test for chlamydia. It may also include tests for other infections that are linked to reactive arthritis.

Joint aspiration (arthrocentesis): A small sample of the synovial fluid is taken from a joint. It's tested to see if crystals, bacteria, or viruses are present.

Urine and stool samples: These are used to look for bacteria or other signs of disease.

X-rays: This test uses a small amount of radiation to create images of tissues, bones, and organs. X-rays are used to look for swelling or damage to the joint. This can check for signs of spondylitis or sacroiliitis.

Gene testing: A test may be done to check for HLA-B27. This gene is seen more often in people with reactive arthritis. But not everyone who has this gene will get reactive arthritis.

TREATMENT:

MEDCATION:

Antibiotics: Antibiotics are used to treat bacterial infection.

Nonsteroidal anti-inflammatory drugs (NSAIDs): NSAIDs such as indomethacin (Indocin), can relieve the inflammation and pain of reactive arthritis.

Steroids: A steroid injection into affected joints can reduce inflammation and allow you to return to your usual activity level. Steroid eye drops may be used for eye symptoms, and steroid creams might be used for skin rashes. **Rheumatoid arthritis drugs:** Limited evidence suggests that medications such as sulfasalazine (Azulfidine), methotrexate (Trexall) or etanercept (Enbrel) can relieve pain and stiffness for some people with reactive arthritis.

PHYSICAL THERAPY: The objective of physiotherapy is to avoid stiffness and deformities and to promote mobility and strength. Physiotherapy may help in the following ways:

- Reduce inflammation
- Reduce pain
- Improve range of movement
- Increase cardiovascular levels
- Help return to activities of daily living and sports

Physiotherapy management may include:

- Strengthening exercises: It should be given to surrounding muscles of the affected joints.
- Range of movement exercises: Mobilisation and stretching exercises should be given to increase the joint ROM of the affected stiff joints.
- Hydrotherapy
- Cryotherapy (ice therapy): It can be given to ease the pain and inflammation.
- Splints: It is used to protect and support affected joints
- If enthesitis is present heel support and orthosis can be considered to decrease pain and thus improve mobility.
- Aerobic exercise: It should include low impact activities, such as swimming, walking, or recumbant bike, depending on the patient's cardiovascular level.
- TENS
- Ultrasound
- IFT
- Joint protection advice

References:

Kim PS, Klausmeier TL, Orr DP. Reactive arthritis: a review. J Adolesc Health 2009;44:309–315. (A1) https://www.mayoclinic.org/diseases-conditions/reactive-arthritis/symptoms-causes/syc-20354838 https://www.cedars-sinai.org/health-library/diseases-and-conditions/r/reactive-arthritis-reiters-syndrome.htm