Difference Between Polymyalgia Rheumatica and Rheumatoid Arthritis

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Key Difference - Polymyalgia Rheumatica vs Rheumatoid Arthritis

Polymyalgia rheumatica and rheumatoid arthritis are two diseases that have a similar presentation. **Polymyalgia rheumatica (PMR)** is a systemic illness of the elderly people which is associated with the finding of a giant cell arteritis on temporal artery biopsy. On the other hand, rheumatoid arthritis is a type of inflammatory arthritis that causes synovial inflammation. Out of these two illnesses, a giant arteritis can be observed only in polymyalgia rheumatica. This is the key difference that separates these disease entities.

What is Polymyalgia Rheumatica?

Polymyalgia rheumatica (PMR) is a systemic illness of the elderly associated with the finding of a giant cell arteritis on temporal artery biopsy.

Clinical Features

- Sudden onset of severe pain and stiffness in the shoulders, neck, hip and lumbar spine.
- The pain usually worsens in the morning and can last for several hours.
- **Fatigue**
- Fever
- Weight loss
- **Depression**
- Nocturnal sweats

Investigations

- CRP and ESR levels are elevated
- A normochromic normocytic anemia can be identified by a full blood count and blood picture
- Temporal artery biopsy
Management

Use of corticosteroids is more effective in the treatment of PMR than NSAIDS. When there is no improvement in the condition of the patient even after the administration of corticosteroids alternative causes for the symptoms such as malignancy should be sought.

What is Rheumatoid Arthritis?

Rheumatoid arthritis is a type of inflammatory arthritis that causes synovial inflammation. It presents with inflammatory symmetrical polyarthritis. Rheumatoid arthritis is an autoimmune disease where auto antibodies are produced against IgG and citrullinated cyclic peptide.

The typical presentation of rheumatoid arthritis includes a progressive, symmetrical, peripheral polyarthritis which occurs over a period of a few weeks or months in patients between 30 and 50 years of age. Most of the patients complain of pain and stiffness of small joints of the hands (metatarsophalangeal, proximal interphalangeal) and feet (metatarsophalangeal) which worsen in the morning. Distal interphalangeal joints are usually spared. The affected joints are warm, tender and swollen.

Nonarticular Manifestations

- Scleritis or scleromalacia
- Dry eyes and dry mouth
- Pericarditis
- Lymphadenopathy
- Pleural effusion
- Bursitis
- Tendon sheath swelling
- Anemia
- Tenosynovitis
- Carpal tunnel syndrome
- Vasculitis
- Splenomegaly
- Polyneuropathy
- Leg ulcers

**Complications**

- Ruptured tendons
- Ruptured joints
- Joint infection
- Spinal cord compression
- Amyloidosis

**Investigations**

Diagnosis of RA can be made based on the clinical observations. The clinical suspicion can be supported by the following investigations

- Blood count which can show the presence of normochromic, normocytic anemia
- ESR and CRP measurement.
- ACPA level is increased during the early stages.
- X-rays show the soft tissue swellings.
- Aspiration of the joint when there is a joint effusion.
- Doppler Ultrasound can be used for the identification of synovitis.
Swan Neck Deformity of the Hands

Figure 02: A hand with Rheumatoid Arthritis and Swan Neck Deformity.

NSAIDs and analgesics are used in the management of the symptoms. If synovitis persists beyond six weeks, try to induce remission with intramuscular depot methylprednisolone 80-120mg. If synovitis recurs, the administration of Disease Modifying Anti-Rheumatic Drugs (DMARDs) should be considered.

What is the Similarity Between Polymyalgia Rheumatica and Rheumatoid Arthritis?

- Both conditions commonly affect elderly people.

What is the Difference Between Polymyalgia Rheumatica and Rheumatoid Arthritis?

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Clinical features of PMR are,

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· The pain usually worsens in the morning and can last for several hours.
· Fatigue
· Fever
· Weight loss
· Depression
· Nocturnal sweats
Diagnosis

**Investigations performed for the diagnosis**
- CRP and ESR levels are elevated
- A normochromic normocytic anemia can be identified by a full blood count and blood picture
- Temporal artery biopsy

Diagnosis of RA can be made based on the clinical observations. The clinical suspicion can be supported by the following investigations
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Summary - Polymyalgia Rheumatica vs Rheumatoid Arthritis

Polymyalgia rheumatica (PMR) is a systemic illness of the elderly associated with the finding of a giant cell arteritis on temporal artery biopsy whereas rheumatoid arthritis is a type of inflammatory arthritis that causes synovial inflammation. A giant arteritis of temporal artery is observed in PMR but not in rheumatoid arthritis. This is the main difference between these two conditions.

Reference:

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1.'845225'(Public Domain) via Max Pixel
2.'Rheumatoid Arthritis (Swan Neck Deformity)'By BruceBlaus - Own work, (CC BY-SA 4.0) via Commons Wikimedia

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MLA: "Difference Between Polymyalgia Rheumatica and Rheumatoid Arthritis"

Chicago: “Difference Between Polymyalgia Rheumatica and Rheumatoid Arthritis.”

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