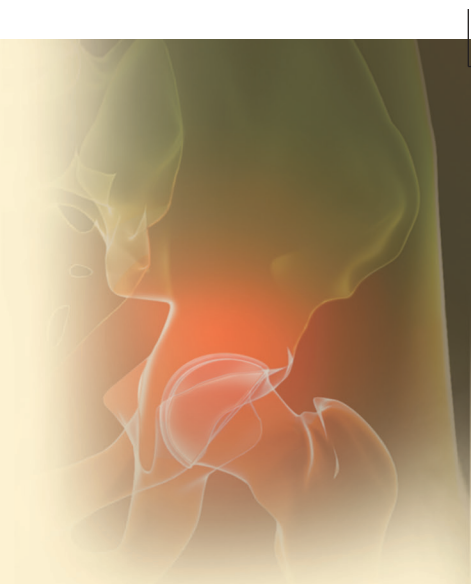


Rheuma Facts[®]

A Quarterly Magazine

Serving physicians with interest in Rheumatology

17th Issue Quarter 1, 2023



It Hurts All Over..... Fibromyalgia!

Dr. Ahmad Iqbal Mirza

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Current News

FDA Approves Combination Pegloticase and Methotrexate for Refractory Gout

The US Food and Drug Administration (FDA) has approved concomitant use of the biologic pegloticase and methotrexate to lower serum uric acid levels (sUA) in patients with chronic gout.

Pegloticase, which has been available for 12 years, is a pegylated uric acid-specific enzyme that lowers sUA by converting it to allantoin.

Though pegloticase is effective in treating chronic gout in patient's refractory to conventional treatment, approximately 92% of patients develop antibodies against the drug, resulting in reduced efficacy.

Based on the immunomodulatory effects of methotrexate, researchers of the randomized, placebo-controlled MIRROR trial sought to determine whether combination treatment of pegloticase with methotrexate (multiple brands) would prevent the development of anti-drug antibodies.

Findings from the phase 4 trial found that co-administration of pegloticase and methotrexate reduced the formation of new anti-PEG antibodies. In the group receiving methotrexate and pegloticase, 23.2% (22 out of 95) of patients had an increase in anti-PEG antibodies compared with 50% (24 of 48) in the pegloticase plus placebo group.

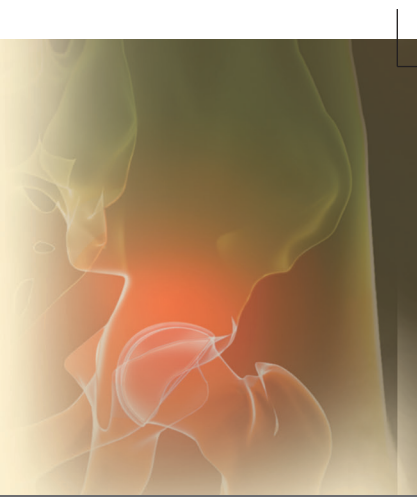
Nearly three quarters (71%) of participants in the group pretreated with methotrexate, followed by combination pegloticase-methotrexate, had sUA levels that dopped to below 6 mg/dL during the 52-week study. By comparison, 38.5% of participants in the pegloticase and placebo group reached the endpoint. Though gout flare occurred in both groups, methotrexate did not appear to increase the risk for adverse events or gout flare.

The study concluded that these measurements demonstrated a significant improvement from traditional pegloticase-only treatment of gout. This trial confirms not only improved efficacy but improved safety in patients treated with pegloticase in combination with methotrexate 15 mg orally once weekly.

Reference: <https://www.medscape.com/viewarticle/976955>

Rheuma Facts®

A Quarterly Magazine



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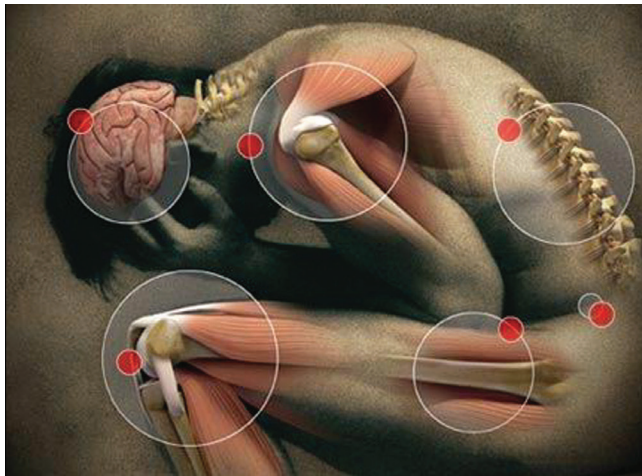
It Hurts All Over..... Fibromyalgia!

Compiled and summarized by:
Dr. Ahmed Iqbal Mirza Consultant Rheumatologist
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Fibromyalgia is a common and complex chronic pain disorder that affects people across the board physically, mentally and socially. Fibromyalgia is a syndrome rather than a disease characterized by chronic widespread pain.

Unlike arthritis, the joints are not directly affected in fibromyalgia. The pain of FM is often described as aching or burning and is unpredictable in nature. Its severity varies from day to day, and different parts of the body tend to be affected at different times. FM pain can be extremely severe and disabling or it may cause only moderate discomfort. Despite its many symptoms and their potential severity, FM does not cause physical deformity nor interfere with normal life expectancy. However, it can be a very challenging disorder, and until the patient is able to manage it through appropriate treatment and medication, FM can adversely affect quality of life and can interfere with basic daily activities.



Causes:

New research findings continue to bring us closer to understanding the basic mechanisms of fibromyalgia. Most researchers agree that FM is a disorder of central processing with neuroendocrine/neurotransmitter deregulation.

The FM patient experiences pain amplification due to abnormal sensory processing in the central nervous system. An increasing number of scientific studies now show multiple physiological abnormalities in the FM patient, including:

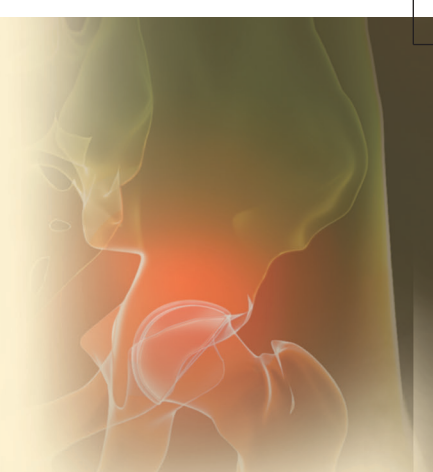
- Increased levels of substance P in the spinal cord.
- Low levels of blood flow to the thalamus region of the brain.
- Hypothalamic pituitary axis hypo function.
- Low levels of serotonin and tryptophan and abnormalities in cytokine function.

Recent studies have shown that genetic factors may predispose individuals to a genetic susceptibility to FM. For some, the onset of FM is slow; however, in a large percentage of patients the onset is triggered by an illness or injury that causes trauma to the body. These events may act to incite an undetected physiological problem already present.

Symptoms of fibromyalgia:

Chronic widespread body pain is the primary symptom of fibromyalgia. In addition to pain, the following symptoms may accompany FM:

- Fatigue ranging from a "tired" feeling to an all consuming exhaustion.
- Un-fresh sleep despite getting adequate sleep. Also, difficulty falling asleep or staying asleep.
- Stiffness upon awakening or after remaining in one position for a prolonged period. May also accompany weather changes.
- Headaches often the result of extremely tight or over worked neck and shoulder muscles that refer pain upwards.
- Light-headedness/balance problems usually involve a difficulty with balance (particularly while standing still) or with visual tracking/ orientation when engaged in activities requiring a lot of eye movement.
- Temporomandibular (jaw) joint dysfunction, a condition quite common in FM.
- Abdominal discomfort, abdominal pain and bloating, constipation, and/or diarrhea (also known as irritable bowel syndrome)
- Pelvic pain/discomfort may include an increase in urinary frequency or urgency to urinate, often without infection (irritable bladder), or at times, interstitial cystitis, a chronic, inflammatory condition of the bladder wall.



- Gynecological symptoms may include pre-menstrual syndrome (PMS), painful menstruation.
- Numbness or tingling, a prickling or burning sensation, particularly in the arms or legs (paresthesia)
- Chest Wall pain: intense muscular pain at the spot where the ribs meet the chest bone, accompanied by shallow breathing also known as costochondralgia or costochondritis.
- Cognitive Disorders: difficulty concentrating, "spaciness", memory lapses, word mix-ups when speaking/writing, and clumsiness ("fibro-fog")
- Sensory Sensitivity hypersensitivity to light, noise, touch, and odors as well as cold or heat. Allergic-like symptoms (i.e rhinitis, itching, rash, etc) may also occur.
- Emotional responses: Irritability, anxiety, depression, and/or feelings of isolation are not common and often stem from the chronic and unpredictable nature of fibromyalgia.

Who Develops FM?

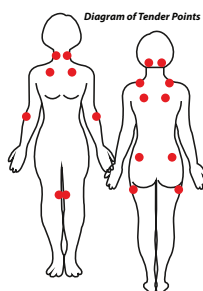
Fibromyalgia affects a significant segment of the population. According to conservative estimates, between 4 and 6 million. An estimated 80% of sufferers are women, most of them are of working age, so FM has obvious consequences for employment and increased family stress. Fibromyalgia also occurs in all other age groups and in men and it exists in all races worldwide.

Diagnosis

Fibromyalgia is not a diagnosis of exclusion and must be diagnosed by its own characteristic features. Currently there are no laboratory tests available for diagnosing fibromyalgia. We must rely on patient histories, self-reported symptoms, a physical examination and an accurate manual tender point examination.

This evaluation usually consists of:

1. Ruling out medical conditions whose symptoms mimic FM (i.e., thyroid disease, Multiple sclerosis, lupus, etc)
2. An extensive medical history which includes a "tender point" exam the supplication of



pressure to specific diagnostic, anatomical points identified by the ACR in 1990 as especially sensitive in fibromyalgia patients.

To receive a diagnosis of FM, the patient must meet the following ACR 1990 diagnostic criteria:

- Widespread pain in all four quadrants of the body for a minimum duration of three months
- Tenderness or pain in at least 11 of the 18 specified tender points when pressure is applied

Treatment

One of the most important factors in improving the symptoms of FM is for the patient to recognize the need for lifestyle adaptation. Most people are resistant to change because it implies adjustment, discomfort and effort. However, in the case of FM, change can bring about recognizable improvement in function and quality of life. Becoming educated about FM gives the patient more potential for improvement.

An empathetic physician who is knowledgeable about the diagnosis and treatment of FM and who will listen to and work with the patient is an important component of treatment. It may be a family practitioner, or Rheumatologist.

Pain management

A number of pharmacological treatments for fibromyalgia are available for prescription.

The drugs approved by the FDA to treat fibromyalgia are:

1. Pregabalin
2. Duloxetine
3. Milnacipran.

Pregabalin is widely used all over for the treatment of FM. Additionally, patients with FM are treated with non-narcotic pain relievers, or low doses of antidepressants. An important aspect of pain management is a regular program of gentle exercise and stretching, which helps maintain muscle tone and reduces pain and stiffness.

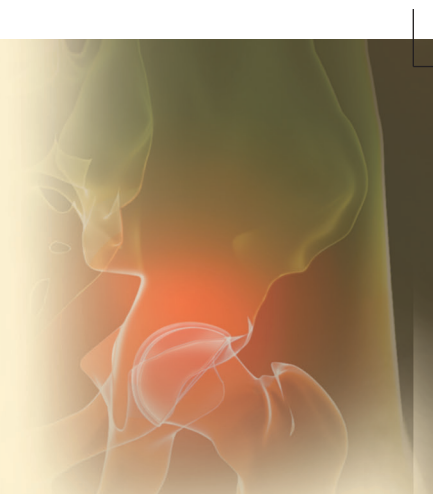
Other treatments

Complementary therapies can be very beneficial. These include: Physical therapy, therapeutic massage, light aerobics, application of heat or cold, acupuncture, yoga, relaxation exercises, breathing techniques, cognitive therapy.

A practitioner's guide to pain in older patients

Compiled and summarized by:

Dr. Ahmed Iqbal Mirza Consultant Rheumatologist
Aga Khan University Hospital, Karachi



Persistent or chronic pain is common among older population. Pain may be multifactorial and difficult to identify but because it is so common, all patients especially older population coming to our clinic should be asked about pain.

- Elderly patients may take pain for granted; unless asked, many may not mention it at all
- While some elderly people deny any pain, they may admit to having aches or discomfort
- Some ethnic groups are more willing to express pain than other such groups, although it is not known whether they experience pain differently

Some misconceptions of pain in Older Patients

- It's a sign of weakness to admit to pain or a sign of strength to bear with it
- Pain is just part of aging and there's nothing to be done about it
- Pain is punishment for past actions
- Chronic pain means death is approaching
- Chronic pain always means serious underlying disease
- Acknowledging pain will lead to intrusive and possibly painful tests
- Pain means a loss of independence

Interesting to note that older patients have high tolerance for pain, cannot be accurately assessed for pain, and are likely to become addicted to pain medications

The Consequences of Unmanaged Persistent Pain: Unmanaged pain in older patients can have numerous consequences, including:

- Depression
- Anxiety
- Decreased socialization
- Sleep disturbance or insomnia
- Impaired ambulation

Conditions associated with pain on older patients: Conducting a Comprehensive Assessment:

To conduct a more comprehensive pain assessment interview, it's important to obtain a thorough pain history. This can provide useful insights into the onset, pattern, quality, duration, location, intensity, and timing of the pain. It can also help identify potential triggers that aggravate and/or relieve the pain.

A thorough pain assessment should include:

- History
- Physical examination
- Laboratory and diagnostic tests, if appropriate
- Evaluation of psychological function

The following sample questions can help capture important information that can lead to a more-comprehensive pain-assessment interview.

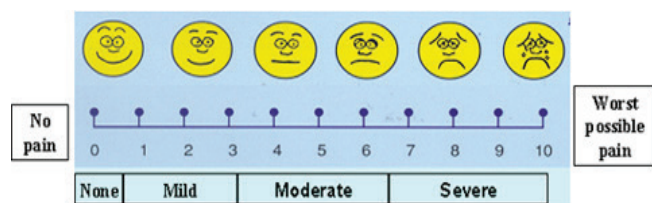
- When and how did the pain start?
- Does the pain have a pattern (e.g., comes and goes, always present, etc.)?
- How intense is the pain?
- Where is the pain?
- What makes the pain better or worse?
- How does the pain interfere with daily activities (eating, sleeping, bowel/bladder function, etc.)?
- How does the pain impact your mood? Do you also feel depressed or anxious?

In order to obtain a comprehensive assessment, it's important for healthcare providers to be aware of possible barriers that can interfere with the pain-assessment process, including cognitive issues, social and cultural barriers, and patients who can't or don't verbalize their pain. For instance, many older patients assume that pain is a normal part of aging and may be reluctant to talk about it.

- Degenerative joint disease
- Rheumatoid arthritis
- Fibromyalgia
- Spinal column disorders
- Crystal-induced arthropathies
- Osteoporosis with compression fractures
- Neuropathies (e.g. PHN)
- GI conditions such as ileus and peptic ulcers
- Degenerative joint disease
- Rheumatoid arthritis
- Fibromyalgia

- Spinal column disorders
- Urogenital conditions such as kidney stones
- Headaches
- Oral or dental pathology
- Peripheral arterial disease
- Post stroke syndrome
- Immobility, contractures
- Pressure ulcers
- Amputations
- Urogenital conditions such as kidney stones
- Headaches

Several self-reporting scales are useful during pain assessments:



Numeric rating scale (NRS):

Most commonly used scale measuring pain intensity from 0 to 10 (0 is No Pain and 10 is Worst Pain Imaginable)

Faces Pain Scale-Revised (FPS-R):

Series of faces from happy to very upset, shows degrees of distress. Also incorporates numerical values for pain

Pain Management and Older Patients

The diagnosis and treatment of pain in older patients are complicated because of multiple medical problems and possible sources of pain. As a result, pain may not be adequately treated in senior patients nor always documented in their medical charts. Inadequate pain relief puts the elderly at increased risk of depression, sleep disturbance, anxiety, fatigue, impaired ambulation, dementia, aphasia, and decreased socialization. Ongoing pain may lead to polypharmacy and increased use and costs of healthcare resources.

Treatment plans for older patients should begin by discussing goals, expectations, risks, and benefits and should be individualized to account for patient factors such as disability, limited finances, complex drug regimens, and even means of transportation to/from points of healthcare delivery.

The elderly are more likely than younger patients to experience adverse effects from pain medications thus, careful dosing titration, frequent assessment and monitoring, and adjustments are usually required which include these recommended steps.

- **Reassess regularly:** As often as daily for acute pain until substantially controlled with a stable analgesic regimen; no less than quarterly for chronic pain, though many patients may need more-frequent reassessment
- **Reevaluate patient's pain regularly:** Use an appropriate pain assessment tool to reevaluate the older patient any time current pain control appears inadequate to the provider or caregiver
- **Monitor for adverse events**
- **Adjust treatment as necessary:** If a revised care plan is indicated, recommend appropriate treatment changes in

medications and/or complementary therapies and discuss the proposed with the patient and family members.

- **Repeat the above as appropriate** until the pain is under control- or the practitioner believes that no further improvement is likely. The primary care physician should consider referral to a geriatrician, neurologist, physiatrist, pain clinic, or palliative-care specialist for patients not responsive to the above pain-management steps

Factors to consider in choosing an appropriate pain therapy in elderly

- What are the patient's underlying diagnosis and coexisting conditions?
- What evidence supports the safety and efficacy of the treatment?
- What are the preferences of the patient, family, or substitute decision maker?
- What is the patient's past experience with the specific therapy?
- Which skilled and experienced providers are available?
- What adverse interactions are possible between the proposed CAM and the patient's current medical therapy?

Take home message

Patient comfort and well-being are always paramount and the basis for effective pain management. Seek adequate pain management in each case. Tailor pain management to each patient's needs, situation, health conditions, and risk factors. Healthcare team providers share responsibility to advocate for the patient's comfort through appropriate and cost-effective means. Pharmacologic treatment when used should provide satisfactory pain relief using the most effective dose with fewest adverse effects choosing appropriate medication, balance treatment benefits and costs

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PATIENT FACT SHEET

Psoriatic Arthritis



CONDITION DESCRIPTION

Psoriatic arthritis (PsA) is a chronic joint and skin disease.

Some people have mild, occasional flare-ups. Others may have ongoing inflammation that can cause joint damage if it's not diagnosed early and treated. affects large joints in the lower extremities, but may also occur in joints like the fingers, toes, back or pelvis.

Psoriatic arthritis often, but not always, happens to people who also have psoriasis, a skin disease. It often affects

large joints in the lower extremities, but may also occur in joints like the fingers, toes, back or pelvis.

It usually starts between ages 30 and 50. Men and women are equally at risk. Children with psoriatic arthritis have a higher risk of uveitis, an eye inflammation.

Treatments aim to ease pain, protect joints and maintain mobility. Physical activity is also helpful.



SIGNS/ SYMPTOMS

Psoriasis causes scaly, red and white skin rashes.

The body's immune system is out of control and attacks the skin. Some people with psoriasis also develop arthritis with stiff, swollen joints.

Psoriatic arthritis may affect one or many different joints. Your fingers and toes may swell and look like sausages, called dactylitis. Fingernails and toenails may become pitted.

Other signs and symptoms of psoriatic arthritis include:

- Spine inflammation called spondylitis. You may have a stiff back or neck and trouble bending over.
- Enthesitis, or tender spots where ligaments and tendons go into bones.
- Anemia, which can cause fatigue.



COMMON TREATMENTS

Diagnosing psoriatic arthritis starts with a physical exam to look for swollen or painful joints, and nail and skin changes. X-rays or scans like ultrasound, MRI or CT can show joint damage. Blood tests may help rule out other diseases, and a skin biopsy can confirm psoriasis.

Treatments depend on your level of pain, swelling or stiffness. Mild arthritis flares may be treated with nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen or naproxen sodium.

Corticosteroid shots may ease pain and swelling in an affected joint.

If NSAIDs don't ease arthritis symptoms, your rheumatologist may prescribe Disease Modifying Antirheumatic Drugs (DMARDs), such as sulfasalazine,

methotrexate, cyclosporine or leflunomide. Hydroxychloroquine may be used, but could cause a skin flare. People with severe arthritis may try azathioprine .

Other treatments include biologics, typically starting with TNF inhibitors, such as adalimumab, certolizumab pegol , etanercept, golimumab, infliximab. Other biologics used for psoriatic arthritis include the IL-17 inhibitors secukinumab and ixekizumab, or others classes as ustekinumab and abatacept. Newer oral medications, such as tofacitinib have also been shown to be effective.



CARE/ MANAGEMENT TIPS

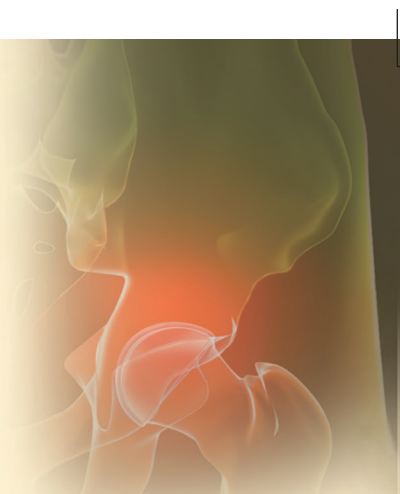
People with psoriatic arthritis can do a lot to manage their symptoms and maintain their quality of life. Here are some tips to manage psoriatic arthritis:

- Exercise improves health, keeps muscles strong and joints flexible. Try simple activities like walking, riding an exercise bike, yoga, warm-water pool exercises or stretching.

- Psoriatic arthritis is associated with high blood pressure, obesity, type-2 diabetes and high cholesterol. Maintain a healthy weight and get treatment for any of these conditions.

- Learn how to protect joints from injury, strengthen muscles and stay flexible with the help of a physical therapist (PT) or occupational therapist (OT). They can also show you how to use assistive devices to do your daily tasks.

Photo Quiz



Question

What is the Diagnosis?



Winners of Lucky Draw

The editorial board of Rheuma Facts Magazine is pleased to announce the names of winners for the photo-quiz of the 16th issue. The lucky draw was conducted at Karachi and following are the names of the lucky draw winners randomly drawn by Dr. Ahmed Iqbal Mirza.

We congratulate the winners and once again thank all the contestants for their participation in the quiz.

- | | |
|--|---|
| 1. Dr. Muhammad Salman Dow University Hospital, OJHA Campus, Karachi | 11. Dr. Ali Muqaddas Sherazi DHQ Teaching Hospital, Gujranwala |
| 2. Dr. Wazeer Ahmed Civil Hospital, Quetta | 12. Dr. Asif Saeed Idrees Teaching Hospital, Sialkot |
| 3. Dr. Asif Ali Sheikh Chandka Medical College, Larkana | 13. Dr. Muhammad Shafique DHQ Teaching Hospital, Sheikhpura |
| 4. Dr. Imran Haider Qaisrani Nishter Medical University, Multan | 14. Dr. Nadeem Afzal New City Hospital & Skin Care Clinic, Mirpur A.K |
| 5. Dr. Majid Raza Rehman Medical Complex, Nishter Road, Multan | 15. Dr. Imtiaz Shakira Holy Family Teaching Hospital, Rawalpindi |
| 6. Dr. Ahmed Jamal Nishter Medical University, Multan | 16. Dr. Benish Malik Cantonment General Hospital, Rawalpindi |
| 7. Dr. Adil Amin Govt. Shahdara Hospital, Lahore | 17. Dr. Faryal Ahmed Ayub Teaching Hospital, Abbottabad |
| 8. Dr. Atif Aslam Services Hospital Lahore, Lahore | 18. Dr. Abbas Ali Khyber Teaching Hospital, Peshwar |
| 9. Dr. Waqar Ahmed Lahore General Hospital, Lahore | 19. Dr. Waqar Hussain Lady Reading Hospital, Peshwar |
| 10. Dr. Allah Rakha Hassan Allied Hospital, Faisalabad | 20. Dr. Sajid Akhter Central Hospital, Swat |