Aching for Relief: Pain All Over

By Joanne Homik, MD, MSc, FRCPC

Presented at The Rheumatology Update, November 2, 2002

In this article:

When confronted with a patient whose symptoms are diffuse, it is sometimes difficult to clarify the clinical problem. It is helpful to keep in mind there are broad categories of symptom presentations that may guide you in your history-taking. When patients present with diffuse pain and weakness, we can usually categorize their complaint into one of the following symptom presentations:

1. Proximal muscle weakness

Patients with proximal muscle weakness usually describe difficulty getting out of a chair, and lifting their arms overhead. Proximal muscle weakness is not usually associated with pain.

2. Muscle pain with activity

Some patients will describe pain that occurs when using their muscles. There is no weakness in the muscles, although their activities may be limited. It is important to exclude joint pain in this scenario.

3. Proximal muscle stiffness in the morning

This presentation is characterized by severe limitation of movement in the morning. The patient may perceive this as stiffness or pain. The morning stiffness usually lasts several hours. The patient may describe feeling well at midday with symptoms returning in the evening.

4. Inability to sleep/pain at night

This symptom category is more non-specific, but should be asked about. The patient will describe difficulty getting to sleep, or waking up in the night with pain.

5. Systemic features/constitutional symptoms

Patients should always be asked about constitutional symptoms, such as fever, anorexia, weight loss, and fatigue.

Let's review three cases (Cheryl, George and Joan), and summarize the presentation characteristics.

Pain All Over

Cheryl's body pain

Cheryl, 34, presents with a two-year history of total body pain. It all began when she was getting over a postpartum depression. She describes her pain as lasting all day, every day, and she has difficulty sleeping.

Cheryl has had to quit her job, and no longer participates in sporting activities, due to her pain.

Symptom presentation:

Muscle pain with activity, and pain at night.

George's pain

George, 48, presents with a two-month history of progressive disability. He is fatigued, and finds it hard to climb stairs or even get out of his bed without help. He describes fever, anorexia, and weight loss over the last few weeks. Last week, he noticed his urine was brown.

Symptom presentation:

Proximal muscle weakness, and constitutional symptoms.

Joan's all-over pain

Joan, 77, describes a six-month history of pain all over. She has trouble sleeping, secondary to pain and stiffness. Once she gets moving in the morning, she feels a lot better. Once she has been sitting for a while, she has trouble getting out of her chair.

Symptom presentation:

Proximal muscle stiffness in morning and trouble sleeping.

Dr. Homik is an assistant professor of medicine, University of Alberta, and a rheumatologist, University of Alberta Hospital, Edmonton, Alberta.

At this time, we will review three rheumatologic diagnoses that present with muscle pain and weakness, and link them with the most common symptom presentation. Remember, there are many other causes of diffuse pain and weakness. Some of these include:

1. endocrine disorders (hypo- or hyperthyroidism, addisons, hyperparathyroidism),
2. drug-induced myositis (statin lipid lowering agents, chloroquine), and
3. malignancies (multiple myeloma, paraneoplastic syndromes).

What are inflammatory myopathies?

This group of diseases classically presents with painless proximal muscle weakness with or without constitutional symptoms. The two subgroups are dermatomyositis and polymyositis. The incidence of the disease is bimodal, affecting children and middle-aged adults most frequently. There is usually a gradual onset of muscle weakness over three to six months. Facial and ocular muscles are spared. Patients may describe difficulty swallowing, or shortness of breath due to pharangeal or intercostal weakness. Patients may have features of other connective tissue diseases (overlap syndrome).

To distinguish the two subgroups, there is a classic rash described in dermatomyositis. It may appear on the hands, over small joints, or on the face and shawl area (Figures 1 and 2). The proximal muscles are weak on examination, with good preservation of distal muscle strength. Loss of neck flexion is characteristic.

To confirm a myopathic problem, we look for an elevated creatine kinase. The disease is confirmed with a muscle biopsy. Typical features include mononuclear cell infiltrate, muscle necrosis, and perifascicular atrophy. Pathologic findings are specific for these diseases, and biopsy can distinguish between polymyositis and dermatomyositis. Electromyography (EMG) may show typical features, but

biopsy should not be done in an area of previous EMG.

Other causes of diffuse muscle weakness include:

- drug or toxic myopathies,
- neuromuscular disorders,
- endocrine disorders,
- infectious myopathies, and
- metabolic disorders.

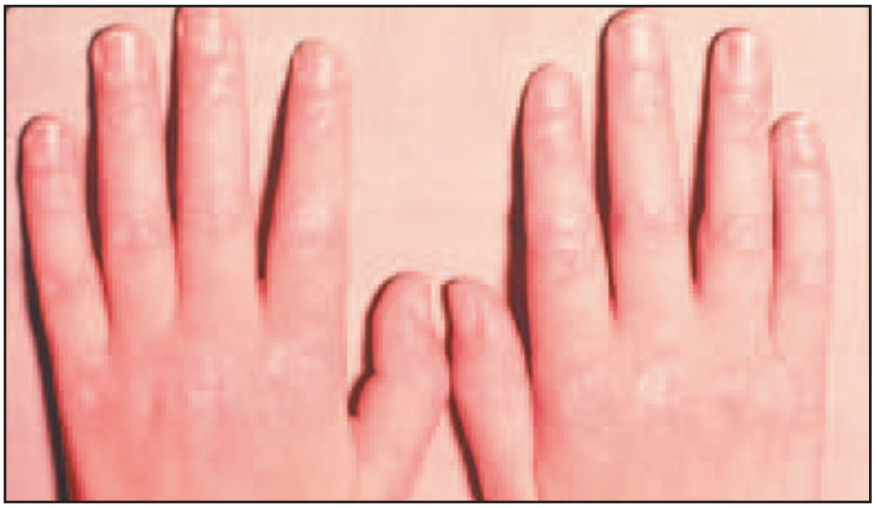

Figure 1. Hand rash in dermatomyositis.

What is fibromyalgia?

Fibromyalgia is the most common cause of diffuse pain. Fibromyalgia is believed to occur in 2% of the general population. The patients mostly affected are females (> 80%), and are often between 30 and 60. There is no clear etiology or pathogenesis, but fibromyalgia may be related to the spectrum of chronic pain disorders.

Patients usually present with a long history of diffuse chronic pain, fatigue, and nonrestorative sleep. Flares in their symptoms may be precipitated by minor activity or weather changes. They may complain of paresthesias in a nondermatomal distribution. On physical exam, there is no evidence of joint inflammation, deformity, or muscle weakness. Classically, one finds tenderness in well-described trigger points. The American College of Rheumatology has developed classification criteria for this disease (Table 1).

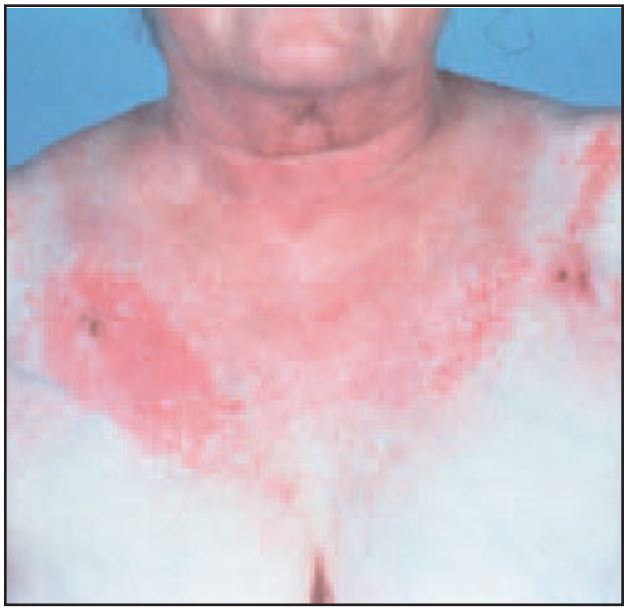

Figure 2. Shawl rash in dermatomyositis.

Laboratory workup is not indicated unless there is a question regarding the diagnosis. One needs to rule out systemic diseases, such as rheumatoid arthritis, myositis or polymyalgia rheumatica, with a thorough history and physical. Think carefully about making the diagnosis in an elderly individual, as there are many disorders that may cause similar symptoms in the elderly (multiple myeloma or polymyalgia rheumatica).

With fibromyalgia, we emphasize management rather than cure. Only 25% of patients experience significant long-term improvement in their symptoms. The goals of therapy are to restore the sleep pattern with a tricyclic antidepressant, and initiate a physical conditioning exercise program. If underlying anxiety or depression is present, it should be treated. In all instances, use of narcotic analgesics should be discouraged.

Pain All Over

Table 1
American College of Rheumatology Classification Criteria

Cardinal features

- Chronic widespread pain (bilateral, and above and below the waist)
- At least 11 of 18 tender points

Common features

- Fatigue
- Sleep disturbance
- Headaches
- Irritable bowel syndrome
- Depression/anxiety

What is polymyalgia rheumatica?

Polymyalgia rheumatica is a relatively common cause of axial stiffness in the elderly. It may be associated with temporal arteritis or occur on its own. It is occasionally associated with peripheral synovitis. Patients describe an abrupt onset of symptoms (mainly pain in the shoulder and pelvic girdle). Morning stiffness of several hours duration is a prominent complaint. Patients may also describe pain at night or constitutional symptoms. The diagnosis is confirmed by an elevated sedimentation rate as well as a rapid response to low dose prednisone. It must be emphasized that this is a clinical diagnosis based mainly on the classic history. There are no distinctive physical features, although patients may have some tenderness to muscle palpation. Treatment is with low dose (10 mg/day) prednisone, tapered slowly as the patient's symptoms allow. Most patients are off prednisone by one year. It is recommended to use a bisphosphonate for prophylaxis against steroid-induced osteoporosis.

Take-home message

Diffuse pain and weakness, can generally be categorized into one of these symptom groups:

- Proximal muscle weakness
- Muscle pain with activity
- Proximal muscle stiffness in the morning
- Inability to sleep/pain at night
- Systemic features/constitutional symptoms

Pain relief

- With fibromyalgia, the emphasis is on management rather than cure (only 25% of patients experience long-term improvement).
- With polymyalgia rheumatica, low dose prednisone will initiate a rapid response to symptoms.

The final word

There are many causes of diffuse pain and weakness, and it can be difficult to pinpoint an underlying diagnosis. If we can identify the characteristic features of the presentation, we can narrow our differential diagnosis, and target diagnostic testing where necessary. CME

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For an electronic version of this article, visit *The Canadian Journal of CME* online.

Net Readings

1. Fibromyalgia Network: www.fmnetnews.com
2. The Arthritis Society: www.arthritis.ca