PALLIATIVE CARE
CASE OF THE MONTH

Treating Fibromyalgia

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Case: CL was first seen by our palliative care consult service during an admission to the local cancer hospital for pain control. She is a 42-year-old woman with a diagnosis of metastatic renal cell carcinoma. She had a history of a single metastatic lesion to the brain as well as diffuse bony lesions. She received CyberKnife therapy to the bony lesions. CL was a stay-at-home mom, and had three young children. She and her husband were building their new house, and her pains prevented her from being active with her children or help her husband. She was admitted to the cancer hospital with diffuse pain but significantly worse pain in the lower extremities as opposed to the upper extremities. These generalized aches and pains had been present for a number of months, and she had undergone an extensive rheumatologic workup. She was ultimately diagnosed with fibromyalgia and commenced on duloxetine approximately three weeks prior to admission. Since the commencement of duloxetine, she noted an improvement in the skin sensitivity in her upper body. She had experienced significant nausea both times when her Cymbalta dose has been increased to 60 mg a day.

CL reported that her pain did not respond as well to opiates as it did to NSAIDs. She noted that in the past when she had been on steroids briefly, the pain was significantly better. Home, she had better relief with acetaminophen and ibuprofen than with opiates. During the hospitalization, the patient was started on scheduled NSAID with acetaminophen and hydromorphone for breakthrough pain.

At the outpatient follow-up visit within two weeks of hospital discharge, CL reported that the pain was reasonably well controlled and that, in fact, she has utilized no breakthrough hydromorphone in the last 48 hours. She admitted to some fatigue and some loose stools, both of which she thought were likely secondary to her recent radiation therapy.

Within two weeks, however, the patient required another admission to the hospital for colitis. Her NSAID therapy was held, and her pain increased. After continued discussion with the patient, as her bowel symptoms resolved, naproxen was resumed at 250mg BID without a return of her symptoms.

Discussion: Fibromyalgia is a disorder characterized by chronic widespread pain in the presence of multiple tender points. The major diagnostic criteria proposed by the American College of Rheumatology require a history of widespread pain for three months and tenderness in at least 11 of 18 defined tender points upon digital palpation. Other features commonly found in patients with fibromyalgia are sleep disturbances and severe fatigue. Patients describe the pain as being deep, widespread, gnawing or burning ache, frequently radiating and quite variable. It is estimated that about two percent of adult population suffers from fibromyalgia, with a prevalence three times higher in women than in men. Along with significant overlap in symptomatology between fibromyalgia and other chronic pain states, the diagnosis of fibromyalgia is complicated by the requirement of tender points; the diagnostic criteria have been criticized for a strong focus on pain rather than the other disabling symptoms patients can have. Many patients with fibromyalgia suffer significant disability and impairment in their quality of life.

Pathophysiologic studies of fibromyalgia have failed to reveal a definite cause for the syndrome; current theories implicate abnormal peripheral and CNS neurotransmitter dysregulation of the hypothalamic pituitary axis and a possible genetic predisposition. While a multidisciplinary approach is preferred for the treatment of fibromyalgia, pharmacotherapy is the mainstay. Tricyclic antidepressants are the most common agents used for fibromyalgia in the US. The SSRIs have failed to show significant benefit in treating pain in fibromyalgia, although they may be beneficial for coexistent depression. Among the SNRIs, duloxetine at a dose of 60mg twice a day and venlafaxine 75mg per day were both found to be effective in reducing pain and improving quality of life. Antiepileptic agents, both gabapentin and pregabalin also are effective in the treatment of pain. Tramadol has also been studied for the treatment of fibromyalgia in doses 50-400mg/day.
Acetaminophen, NSAIDs, in combination with other medications are effective, but have not been evaluated on their own. Opiates are not appropriate long-term treatments because of their addiction potential. Muscle relaxants, while often used, have not been studied in controlled trials.
Due to the variable symptom burden of fibromyalgia (including the occurrence of irritable bowel and bladder symptoms in some patients) and the potential burden of pharmacotherapy, non- pharmacologic measures are often instituted. Cognitive behavioral therapy, exercise, sleep hygiene, acupuncture and dietary measures such as curcumin have all been explored. Randomized trial data is scarce. A prospective trial on biofeedback/relaxation training demonstrated improved self- efficacy (i.e. coping), improved physical activity and tender point examination scores. The study failed to show an improvement in subjective pain scores.

There also are three positive and one negative randomized controlled trials of acupuncture, in conjunction with other treatments, for fibromyalgia. In the positive studies, the pain relief was short lived and of questionable clinical value.

Resolution of the case: Since her discharge from the hospital, CL has not required further hospitalizations. Her pain is controlled with duloxetine, NSAIDs and acetaminophen. She found it difficult to keep her behavioral medicine appointments.

References:

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