A HEALTHY 59-YEAR-OLD WOMAN WITH OSTEOARTHRITIS

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PRESENTATION

Ruth is a healthy and active 59-year-old retired executive secretary who suffers from daily joint stiffness and pain with minimal exertion. Acetaminophen 4 g daily provides only partial relief from pain and stiffness, leaving her unable to participate in the physical activities she enjoys.

MEDICAL HISTORY

Aside from an appendectomy at age 26 years, Ruth's medical history is unremarkable. Her current medications are vitamin D and a calcium supplement.

PHYSICAL EXAMINATION

Ruth is 5 ft, 5 in tall and weighs 132 lb. Her vital signs and auscultatory findings are normal. Her bowel sounds are normal. Palpation of the abdomen reveals it to be soft, nontender, and negative for organomegaly. A rectal exam for occult blood is negative.

Physical examination of the spinal column and the tissues surrounding the shoulder and elbow joints and the joints of the hands and feet is normal. However, the knees, lower back, and the hip joints are painful when Ruth is asked to rise from a sitting position or to bend over and straighten up.

LABORATORY FINDINGS

Standard blood chemistry and lipid profile values are within the normal range. Radiography of the knees, hips, and lower back reveals irregular joint space narrowing and slightly increased radiologic density of subchondral bone, signs that are consistent with a diagnosis of osteoarthritis.

TREATMENT

Because Ruth has none of the established risk factors for GI complications of NSAIDs, ibuprofen 600 mg 3 times daily is recommended as initial therapy. She is instructed to report any GI symptoms.

DISCUSSION

For a patient such as Ruth, who has little or no risk for GI complications and does not use aspirin chronically or require it for cardioprotection, monotherapy with a traditional nonselective NSAID is a reasonable initial approach to reducing the pain and inflammation of osteoarthritis.

Cyclooxygenase-2 (COX-2) selective inhibitors, or coxibs, which are as effective as traditional NSAIDs and cause fewer adverse GI events in patients at low GI risk, are also an option. However, COX-2 selective

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CASE STUDY

inhibitors are more expensive than aspirin and other traditional NSAIDs. Moreover, cost-effectiveness analyses reveal that COX-2 inhibitors yield relatively poor "value" in these patients. Therefore, it is pharmacoeconomics that precludes the routine prescription of safer COX-2 inhibitors as initial therapy for low-risk patients. If cost were not a consideration, therapy for low-risk patients would begin with a COX-2 inhibitor rather than a traditional NSAID.

If Ruth develops GI symptoms while taking a traditional NSAID for osteoarthritis, an antacid or an antisecretory agent, such as a proton pump inhibitor (PPI) or an H2-receptor antagonist should be added to the regimen. Although all of these agents are effective in treating dyspepsia, only misoprostol and PPIs such as omeprazole and lansoprazole have been shown to heal and prevent recurrence of NSAID-induced ulcers at standard doses.

REFERENCES
