COX-2 Inhibitors Spares Knees in Liver Cirrhosis

Short-term use of celecoxib did not affect renal function in patients with decompen-sated liver cirrhosis and ascites who participated in a small randomized trial.

In the double-blind study of 28 patients conducted by Joan Claria, Ph.D., of the University of Barcelona (Spain) and his colleagues, the glomerular filtration rate, renal plasma flow, and serum creatine levels worsened significantly in patients who received five therapeutic doses of naproxen during a 3-day period, compared with baseline values. None of these changes occurred in patients who received five therapeutic doses of celecoxib (Celebrex) or placebo (Hepteo 2005;41:579-87).

Naproxen significantly inhibited platelet aggregation and ex vivo thromboxane B2 synthesis and decreased urinary excretion of prostaglandin E2. Naproxen patients had significantly reduced diuretic and natriuretic responses to furosemide, which normally increases urine volume and urinary sodium excretion. Short-term celecoxib therapy did not reduce platelet or renal plasma flow, and serum creatine levels worsened significantly in patients with decompen-sated cirrhosis, the authors concluded.

The analysis excluded seven patients who had hepaticorenal syndrome and did not have measurements available to calculate glomerular filtration rate or renal plasma flow. A total of 20 patients were included and randomized to receive celecoxib or placebo, as they were the least likely to develop side effects because their plasma renin activity was less than 4 ng/mL per hour.

—Jeff Evans