VITALS

Major Finding: Overall, 55% of children with rheumatologic conditions had vitamin D deficiency or insufficiency, with no significant difference between children with autoimmune conditions (56%) and children with nonautoimmune conditions (52%).

Data Source: An observational study of 254 consecutive children seen in a pediatric rheumatology clinic.

Disclosures: Dr. Pelajo reported that she had no conflicts of interest related to the study.

ng/mL in the group with autoimmune conditions and 29.7 ng/mL in the group with nonautoimmune conditions, a nonsignificant difference, reported Dr. Pelajo, who is a research fellow at the center. Overall, 55% of children had levels of vitamin D in the range for deficiency (less than 20 ng/mL) or insufficiency (20-29 ng/mL), with no significant difference between the two groups.

The prevalence of deficiency was 23% in the children with autoimmune conditions and 14% in the children without; the prevalence of insufficiency was 33% and 38%, respectively.

Vitamin D levels did differ by race/ethnicity: Mean values were highest among white children (30.7 ng/mL), lowest among black children (17.9 ng/mL), and intermediate among children who were Hispanic (21.3 ng/mL), Asian Indian (20.2 ng/mL), and Asian (21.1 ng/mL).

Levels were lower in overweight children, compared with their counterparts who had a normal body mass index (24.1 vs. 29.5 ng/mL, respectively), and they decreased with increasing age.

Finally, levels varied by season of visit, with the highest values seen in summer (36.0 ng/mL) and considerably lower ones seen in fall (27.7 ng/mL), winter (25.7 ng/mL), and spring (26.3 ng/mL).

Children who took supplements had higher vitamin D levels than did their peers who took no supplements. However, when the supplemented group was stratified by dose, the difference relative to the nonsupplemented group was significant only for children who took supplements containing more than 400 IU of vitamin D_3.

"Taking 400 IU is the same as not taking anything because it's such a low dose," commented Dr. Pelajo. ■

For Kids' Pain, Opioid Combo Equals Ibuprofen

FROM THE AMERICAN PAIN SOCIETY ANNUAL MEETING

BALTIMORE — Codeine combined with ibuprofen did not relieve pain from pediatric acute musculoskeletal injuries any more effectively than ibuprofen alone; however, the combination therapy was associated with fewer side effects, according to findings from a small, randomized controlled trial.

Pain management in children generally tends to be poor, and children presenting with a limb trauma need to receive an opioid, and possibly one that's stronger than codeine, "to better relieve their pain and bring it down to below [a Visual Analog Scale score of] 4," Sylvie Le May, Ph.D., said.

The study involved 83 children (aged 6-17 years) who presented to the emergency department at CHU Sainte-Justine University Hospital Center, Montreal, with limb fractures, sprains, and contusions between March 2008 and October 2009. At baseline, the children reported having moderate to severe pain (4-10 on the VAS).

In all, 42 patients were randomized to receive codeine and ibuprofen, whereas 41 patients in the control group received ibuprofen and placebo. The children's pain levels were measured at triage, then at the 60-, 90-, and 120-minute marks afterward.

Children in the experimental group had a mean score of 5.9 VAS at triage, then 4.2, 4.0, and 3.5, respectively; those in the control group had mean scores of 5.7, 3.9, 4.1, and 3.8.

Dr. Le May explained that she undertook the study because, in her experience as a nurse, children "with this kind of pain [from] limb trauma should receive an opioid. That's the standard, but physicians are not following the standard."

Dr. Le May said that her 2005-2007 study of 150 charts of children presenting to EDs with severe sprains, fractures, burns, deep lacerations, and abdominal pain found that only 3% of children received an opioid for their pain.

—Hillel Kuttler

Disclosures: *Dr. Le May reported having no conflicts of interest.*