Fitness Level Is Reduced 20% in Teens With JIA

BY JANE SALODOF MACNEIL
Southwest Bureau

VERSAILLES, FRANCE — A Dutch study of 21 adolescents with juvenile idiopathic arthritis found reduced aerobic capacity tests with and without orthoses, there may be severe functional changes, and 13 performed worse. The boys had better results with their orthoses while 5 girls did only slightly better, at 71%. Both genders also showed moderate impairment in aerobic fitness at peak power: The girls performed at 78% of predicted levels, and the boys performed at 69%.

"Their fitness is about 20% reduced, compared to normal children. They don't feel at ease with exercise," researcher Otto Lelieveld, a physical therapist, said in an interview at the annual scientific meeting of the European Pediatric Rheumatology Congress, where he presented the results in a poster.

Nine boys and 12 girls, aged 16-18, took part in the study. On average, 7.6 years had elapsed since the boys were diagnosed and 8.9 years had elapsed for the girls. The teenagers were required to perform the Wingate sprint test.

Mr. Lelieveld of University Medical Center Groningen (the Netherlands) described this as 5 minutes of steady bicycle riding at low speed, followed by a 30-second sprint at peak power.

The researchers did slightly better in measurements of mean power, both aerobic and anaerobic, during the first part of the test, but still showed moderate impairment in the measurement of muscle endurance, the boys achieved 78% of the mean anaerobic fitness predicted for their weight; the girls achieved 68%. Mean aerobic fitness reached 83% of prediction for the boys and 78% for the girls.

Based on these results, Mr. Lelieveld and his co-investigators called for the development of exercise programs with more anaerobic and aerobic training for children with juvenile idiopathic arthritis.

"We know now from adult rheumatology that physical therapists are training at too low a level," he said.

The children also are afraid to train themselves, he added. "When they are in remission they can have more pain than in the period when they are acute," he said. "When they start functioning at a higher level, they put more strain on their joints. It is like a vicious circle." ■

Foot Orthoses a Quick Fix for Kids With Idiopathic Arthritis

VERSAILLES, FRANCE — Custom-made foot orthoses produced immediate and significant benefits for juvenile idiopathic arthritis patients, according to the results of a study conducted in Stockholm.

Youngsters with cavovarus foot position showed the most pronounced improvements when they began wearing the device, investigator Marie André reported in a poster at the 12th European Pediatric Rheumatology Congress, where she presented the results in a poster.

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The Essen Experience

In Essen, Germany, at the department of integrative medicine, Klinikum Essen-Mitte, a large prospective outcome study found significant benefits from a 7-day fasting program among inpatients with various chronic pain conditions including RA, osteoarthritis, fibromyalgia, and migraine.

Patients typically stay at this clinic for 10-14 days and undergo a program of lifestyle modification and mind-body medicine. Treatment costs for the program are reimbursable in the German health care system.

The clinic, which was founded in 1999, expanded in 2001 and began offering medically supervised therapeutic fasts to all patients except those with eating disorders, liver or renal disease, gastric ulcers, or other comorbidities that could be affected by fasting.

Between 2001 and 2004, there were 2,787 patients who attended the clinic for 3 days or more. Of the 2,121 patients with complete discharge questionnaires, 952 fasted, 873 followed a normocaloric Mediterranean diet, and 296 followed other nutritional programs such as elimination diets or rice diets and were not included in the study.

Fasting was defined as fasting to fast had 2 prefasting days when they consumed 800 calories from fruit, rice, or potatoes. During the 7 days of actual fasting, they were instructed to drink 2.5 L of mineral water, 1 cup of vegetable broth, and juice, for a total caloric intake of 350 kcal. In the 4 days following the fast, foods were slowly reintroduced. Enemas or laxatives were administered during the fast according to patient preference.

At the time of discharge from the clinic, disease-related complaints had improved to a significantly greater degree among fasting patients, the authors of the systematic review, was collected in a randomized, single-blind Norwegian study. The study assigned 27 patients to 4 weeks at a health farm where they fasted initially and then followed a vegetarian diet; another 26 patients stayed at a convalescent home for 4 weeks where they followed an omnivorous diet. The groups were discussed for study at a symposium on alternative and complementary medicine sponsored by the universities of Exeter and Plymouth held in Exeter, England.

"Patients who fasted also seemed to have better success in maintaining beneficial long-term lifestyle changes such as exercise and relaxation," Dr. Michelsen said.

Other Clinical Studies

A systematic review identified 31 original reports on fasting as a treatment for RA. Of them were controlled and methodologically adequate. The results of these four studies "support the hypothesis that a short period of fasting followed by a vegetarian diet can cause clinically relevant long-term improvement in patients with RA" (Scand. J. Rheumatol. 2001;30:1-10).

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