

Press Teens to Prepare for Adult Care Transition

BY TIMOTHY F. KIRN
Sacramento Bureau

SNOWMASS, COLO. — Pediatric rheumatologists who hope to help adolescents make a smooth transition to adult care would be wise to talk up the importance of work.

That includes asking patients about chores and any volunteer experience, Patience H. White, M.D., said at a symposium sponsored by the American College of Rheumatology.

Children with chronic medical conditions often stay with their pediatric providers for too long, and many have a tough time making the transition to adult care. The provider should start preparing children before they are 12 years old to help ease the transition, said Dr. White, chief of pediatric rheumatology at Children's National Medical Center, Washington.

Economics can complicate the transition. Adolescents tend to lose their health care coverage as they become adults. In fact, young adults make up the group most likely to lack health insurance. Two-fifths of high school and college graduates have no health insurance during their first year out of school.

The employment situation can be worse for youth with disabilities or special health care needs because they are often the last hired and first to be let go.

What this all indicates, said Dr. White, is that children with chronic conditions, such as juvenile idiopathic arthritis, need to be prepared to get a job, especially one with insurance. In general, the jobs that offer insurance are those that pay at least \$15 an hour, and most of those positions require at least 2 years of college and some experience.

Although this might seem like a hard-line requirement, the truth is that most youth already work. It's estimated that 40% of middle school and 80% of high school students do chores and/or have paying jobs, suggesting that working is a developmental milestone of adolescence.

Persons with disabilities who make a successful transition to adult life say that the most important factor in preparing them to be resilient adults—even more important than having friends or receiving support from parents and family—was being required to do household chores.

Patients' transitions toward taking responsibility for their own medical care must begin early, she asserted. Most of or-

ganized medicine—including the American Academy of Pediatrics—now recommends that children with special health care needs have a written transition plan by the time they are 14 years old. Dr. White has her patients make a one-page plan, and then works with them on revising it. She begins talking with them about transition when they are about 12 years old, and starts asking parents to leave the room during an examination when patients are 13 years old.

Questioning younger patients helps draw them out and gets them accustomed to the idea of bearing responsibility and making decisions, said Dr. White, who in her ongoing discussions with patients covers the following:

► **Expectations.** Ask patients what they plan to do when they grow up. Also, talk with them about the short-term future.

In addition to the written transition plan, Dr. White also has pediatric patients write out a list of what their responsibilities will be when they take over their own medical care.

► **Transition.** Patients need to be taught to make the transition from pediatrics, which is often prescriptive and nurturing, to adult medicine, which tends to be col-

laborative and cognitive. That means making sure patients thoroughly understand their condition and prognosis.

► **Opinions.** Solicit patients' takes on their condition and care, as a way of affirming their competence and introducing them to the idea that, even as minors, their decisions are their own.

► **Participation.** Ask patients about their social and leisure activities, and ways they can participate in them more fully.

► **Reality.** Acknowledge that adolescence may be a time of experimentation with sex and drugs. Let patients know about consequences, such as drug-drug interactions, and any other effects such choices can have on their specific conditions.

► **Chores and work.** Find out if patients are doing chores and developing independence skills.

► **Attendance.** Support patients' consistent attendance at school, which will reinforce responsible behavior patterns and improve the likelihood of their completing secondary education.

► **Planning.** Spell out the roles of all individuals who are involved in patients' transition to adult care. Emphasize the need for patients to secure health insurance. ■

Gait Analysis Reflects 'Real' Functional Improvements in Kids

BY CHRISTINE KILGORE
Contributing Writer

WASHINGTON — Gait analysis is a promising outcomes assessment tool for children undergoing orthopedic surgery, Norman Y. Otsuka, M.D., said at the annual meeting of the American Academy of Orthopaedic Surgeons.

Results of a study comparing three-dimensional computerized gait analysis with various measures of function and quality of life suggest that gait analysis "reflects real functional abilities, and improvement [in gait analysis] reflects real functional improvement," said Dr. Otsuka of Shriners Hospitals for Children, Los Angeles.

Gait analysis is designed to provide objective, quantitative information about all aspects of gait, from overall walking to specific joint-related ranges of motion.

Children with cerebral palsy have shown improvement in gait analysis results following multilevel orthopedic surgery, but it has not been clear whether such improvements accurately reflect changes in function and quality of life.

In the study, 25 children with cerebral palsy un-

derwent gait analysis and functional testing and participated in validated questionnaires preoperatively and at 1 year after multilevel lower extremity orthopedic surgery. The children, 8-16 years old, all had hip flexion contractures and were part of a larger trial of surgical techniques.

To make gait analysis results more easily interpretable, Dr. Otsuka and his colleagues used

a summary gait analysis variable, called the "Normalcy Index," which reflects the extent to which a child's gait deviates from the normal. The index is calculated from 16 kinematic and temporal parameters measured by gait analysis.

They compared the Normalcy Index with the total score for dimensions D (standing) and E (walking, running, jumping) of the Gross Motor Function Measure (GMFM), the walking score from the Gillette Functional Assessment Question-

naire (FAQ), and scores from the Pediatric Outcomes Data Collection Instrument (PODCI).

Results showed a strong correlation overall between the gait analysis Normalcy Index and the other scores, both before and after surgery, Dr. Otsuka said. Change in the Normalcy Index was most strongly correlated with change in the GMFM score; it did not correlate significantly with the PODCI score. ■



SHRINERS HOSPITALS FOR CHILDREN

The analysis provides information about specific joint-related ranges of motion.

Long-Term Arterial Endothelial Dysfunction Not Related to KD

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Systemic arterial endothelial dysfunction was significantly related to higher levels of triglycerides and fasting blood glucose, but not to other cardiovascular risk factors in a long-term follow-up study of patients with Kawasaki disease, Brian W. McCrindle, M.D., reported at an international Kawasaki disease symposium.

Those particular factors "may be indicators of ongoing inflammation, which may be addressed by long-term aspirin use, antioxidant vitamins, or, in extreme cases, use of a statin," Dr. McCrindle, a pediatric cardiologist at the Hospital for Sick Children, Toronto, told RHEUMATOLOGY NEWS.

The findings suggest that systemic arterial endothelial dysfunction is not present in the long term after Kawasaki disease and that brachial artery activity is not related to the degree of past or current coronary artery involvement.

Dr. McCrindle was surprised by the findings, which conflict with similar reports from Japanese investigators. "The difference may be in the control population used for comparison, with North American children being more sedentary, having poorer nutrition, and being more overweight [compared with Japanese children]," he said at the symposium. ■

Dr. McCrindle and his associates enrolled 52 patients, aged 10-20 years, who had their initial episode of Kawasaki disease between 1982 and 1998 and who had been followed for a mean of 11 years. They also enrolled a group of 60 normal controls matched for age and gender.

The investigators performed a cardiovascular risk assessment of all participants. Systemic arterial endothelial function was obtained to assess brachial artery reactivity (BAR).

The mean BAR dilatation in Kawasaki disease patients was 8.9%, which was not significantly different from the controls (9.4%), and was not related to any disease characteristic or measure of current or past coronary artery lesions.

In addition, the investigators observed no differences between the BAR of Kawasaki disease patients and that of controls in terms of age, gender, Tanner stage, skinfold thickness percentile, body mass index z score, physical activity levels of the patient or family members, or responses to the dietary assessment.

The lab results showed no differences between the groups in total cholesterol; HDL; LDL; apolipoproteins A-1, B, or E; lipoprotein (a); homocysteine or fibrinogen levels; or 24-hour microalbumin excretion.

However, decreased BAR in Kawasaki disease patients was significantly and independently related to higher triglyceride levels and higher fasting blood glucose levels. ■