Kids study finds real attention deficits

By Dr. Richard Bruno

A new study has shown that about three-quarters of young people with CFIDS do not have psychiatric disorders but have problems with attention similar to those in attention deficit disorder.

"Many doctors say that kids with chronic fatigue are either making up their symptoms, are afraid to go to school or are depressed," said Dr. Richard L. Bruno of New Jersey's Englewood Hospital and Medical Center, principal investigator of the first study of brain functioning in young people with CFIDS. The study was funded by the CFIDS Association of America and presented in April to the National Institutes of Health "State of the Art" workshop on CFIDS in adolescents.

In the study, 24% of the young people with fatigue had psychiatric diagnoses – personality, factitious and depressive disorders – that could be responsible for the fatigue. "However, 76% of the subjects had no psychiatric diagnoses, met criteria for CFIDS and had attention deficits that may explain both their inability to concentrate and their overwhelming exhaustion," said Dr. Bruno.

Dr. Bruno, Dr. Susan Creange and Dr. Todd Lewis, a neuropsychologist at Philadelphia's Magee Rehabilitation Hospital, screened 38 young people (average age 16) reporting chronic fatigue. The subjects received a dozen neuropsychologic tests of attention and concentration. Ten non-fatigued young people were screened as controls.

"Kids who had CFIDS more frequently reported difficulty staying awake during the day, trouble concentrating, frequent headaches and sore lymph glands," said Dr. Bruno. Scores on four of the neuropsychologic tests of attention were clinically abnormal in the CFIDS group, while scores on two additional tests of attention were significantly lower in the CFIDS subjects and lowest in those with severe daily fatigue.

Dr. Lewis, who was not told the subjects' diagnoses, was asked to rate the severity of attention. Control subjects were not impaired, he reported, but most CFIDS subjects were mildly impaired, consistent with their complaints of trouble concentrating. However, one third of subjects with psychiatric diagnoses were moderately impaired and severely, and these impairments were not consistent with their above average grades.

"These findings remind us that impaired attention, fatigue and muscle pain can be symptoms of a psychiatric disorder, but that fatigue and impaired attention are not just psychiatric symptoms," said Dr. Bruno. "The signs and symptoms of CFIDS are not the same as in kids with depression."

Dr. Bruno, director of the Post-Polio Institute at Englewood Hospital and Medical Center, has for eight years studied the disabling chronic fatigue reported by the 1.63 million Americans who survived the polio epidemics of 40 years ago.

"We have found difficulty staying awake, trouble concentrating and significantly impaired attention on neuropsychologic testing in polio survivors with fatigue," says Bruno. "These same problems have been found in adults – and now in kids – with CFIDS. We think that the same kind of viral damage to the brain's activating system we have documented in polio survivors with fatigue may also cause impaired attention and fatigue in adults and kids with CFIDS."

The CFIDS Chronicle www.cfids.org September/October 1998

The similarities between CFIDS and post-polio fatigue have led Bruno to apply his 15 years of experience treating chronic fatigue in polio survivors to young persons with CFIDS (YPWCs).

New kids fatigue program

"It is time that doctors start looking at CFIDS from the brain up, instead of from the mind down," said Bruno, "so that kids with fatigue start getting help for their symptoms instead of being blamed for them." Based on the successful program developed at The Post-Polio Institute to treat post-polio, Englewood Hospital and Medical Center has begun a multidisciplinary evaluation and treatment program for chronic fatigue in young people.

"The heart of the program is fatigue management: teaching kids to listen to their bodies by keeping daily symptom and activity logs, pace activities to conserve energy, and stop before they're exhausted," said Bruno. "Kids with CFIDS must not be forced to keep going when their brains say 'stop'. They must get off the roller coaster cycle of work-exhaustion-work that prevents CFIDS symptoms from improving."

Diet is a key element

The Fatigue Management Program team consists of specialists in behavior modification, rehabilitation medicine, occupational and physical therapy, pediatrics and fibromyalgia, as well as a dietitian.

"A dietitian is vital," said Dr. Creange, "because our study found that YPWCs eat more poorly that even the usual teen-ager, whose diet consists of hamburgers and fries. Like polio survivors, YPWCs have symptoms that are similar to those in hypoglycemia (low blood sugar) and a diet rich in protein helps to reduce fatigue and brain fog."

The dietary and activity logs the young patients keep have been revealing, she said. "We could see that most of them didn't eat breakfast and they waited hours to eat after getting up or between meals. A normal teen-ager can deal with that; they have other resources. But YPWCs need to keep their glucose at a steady level and avoid the low periods. It helps their fatigue, but it also helps their concentration."

Learning from activity logs

The clinic also has its young patients keep track of their activity hour by hour and note their level of fatigue from none to severe. The young patients also wear a pedometer, which sometimes contradicts their perceptions of how active they are being.

"Most of our patients are teen-agers, and that's a tough time because they're developing socially and trying to keep up with their friends," Dr. Creange said. "They're going to push themselves because they are teen-agers, so we have to teach them to pace themselves. We don't want them to push themselves to the point where they have to veg out for a few days and do nothing, but if they even out their activity, they can still do things that teen-agers need to do."

The Post-Polio Institute's Fatigue Management Program already has been successfully applied to PWCs by Dr. Elizabeth Dowsett of Britain's National M.E. Centre. "In 1993, I read about Dr. Bruno's fatigue management program and have used it as a guideline for our patients' management ever since," said Dowsett. "The program

has amply proved its worth, as some 300 Christmas cards from patients all over the U.K. and from around the world testify."

Says Britain's Jane Colby, co-author with Dowsett of the British study of M.E. in school children and author of *M.E.:* The New Plague: "It is impossible to overstate the importance of Dr. Bruno's work. His study confirms what we have long suspected, that CFIDS and polio are two sides of the same coin. Thanks to Dr. Bruno, there is at last a rationale for stopping the damaging 'use it or lose it' therapies for children with CFIDS."

To reach Dr. Bruno's KIDS Fatigue Program

For more information about The Fatigue Management Program at Englewood Hospital and Medical Center, please call toll free, 877/767-8765, send E-mail to cfseng@aol.com, visit the web site http://members.aol.com/cfseng/kidsfids/cfs.html, or write to Dr. Susan Creange, The KIDS Fatigue Management Program, Englewood Hospital and Medical Center, Englewood, NJ 07631.

For articles on the cause of post-polio and post-viral fatigue, and links between polio, post-polio fatigue and CFIDS, set your browser to http://members.aol.com/harvestctr/pps/polio.html and go to The PPS Library.

The CFIDS Chronicle www.cfids.org September/October 1998