With Recalcitrant Obesity, Think in Subcategories

BY SHERRY BOSCHERT

San Francisco Bureau

SAN DIEGO — Thinking of weight gain simply as the sum of "calories in minus calories out" doesn't cover a minority of obese patients whose dietary records show reasonable caloric balance but who can't seem to lose weight, Dr. Scott R. Rigden said.

These patients may show dietary records reflecting an intake of 1,800-1,900 calories per day, and often say they're tired of health care providers thinking that they're lying in their food diaries because they haven't lost weight, he said at a symposium on obesity sponsored by the American Society of Bariatric Physicians.

"I really think there are a lot of people with special issues, with switched-off metabolisms, that don't fit that model" of calories in/calories out, said Dr. Rigden, a Chandler, Ariz. family physician who has practiced bariatrics since 1976. "What has shut down their metabolism, and how do we turn it back on?"

To help these patients, think in terms of the following five subcategories, and tailor dietary and lifestyle recommendations accordingly, he suggested:

▶ Carbohydrate sensitivity. Dr. Rigden defined a patient with carbohydrate sensitivity as one whose genetic makeup produces a rapid spike of glucose after consuming simple carbohydrates and sugars. That glucose spike in turn triggers a spike in insulin and associated metabolic cellular messengers that tell the body to store fat, not burn it. The insulin spike also causes a rapid and uncomfortable drop in glucose that motivates the person to seek more carbohydrates and sugars to remedy the discomfort.

These patients do not yet meet criteria for metabolic syndrome. They have normal fasting insulin and glucose levels and are not hypertensive. "They often have stellar labs, yet a terrible lifelong obesity issue," Dr. Rigden said.

He has devised a nine-item questionnaire focusing on eating and exercise habits to identify this subgroup.

A four-step treatment plan starts with behavior modification to change the patient's relationship with food and an exercise program with at least 150 minutes of moderate aerobic exercise weekly. The third step emphasizes adequate water intake of at least 64 ounces per day—"perhaps the most overlooked part of a weight management program," he added.

Dietary intervention is the fourth step, starting with a soy protein powder meal replacement plan and switching to a low glycemic diet (which he also called a modified Mediterranean diet) after the patient loses 5%-10% of initial weight.

▶ Metabolic syndrome. Diagnostic criteria for metabolic syndrome include an elevated waist circumference, triglyceride level above 150 mg/dL, an HDL level less than 40 mg/dL for males or less than 50 mg/dL for females, blood pressure above 130/85 mm Hg, and fasting blood sugar above 100 mg/dL.

In these patients, foods that have a high glycemic index cause blood sugar levels to plummet, boosting cravings for more high-glycemic foods such as sugars and fat, Dr. Rigden said. He recommends what he calls a "caveman or cavewoman" diet of low-fat, non-starchy foods that he spells out for patients. After losing 10% of body weight, they switch to the low glycemic diet.

He also recommends nutraceutical medical food with slow-release, amylose-resistant starch, and soluble fiber in the form of 15 g per day of guar gum. Micronutrient support may be the most undervalued component of therapy for these patients, he added.

▶ Hormonal imbalances. Questionnaires and physical examinations will help identify the endocrine problems

that are contributing to recalcitrant obesity in these patients, Dr. Rigden said. Most will be due to clinical or subclinical hypothyroidism. "This is probably the No. 1 hormonal imbalance that I see in people who have switched-off metabolism," he said.

Other hormonal problems to consider in women include polycystic ovarian syndrome or a sex hormone imbalance with estrogen dominance. Tailor treatment to the

particular problem, he said.

▶ Food hypersensitivity. These are not true allergies but hypersensitivities that can lead to switched-off metabolism, Dr. Rigden said. Wheat and milk are the most common reactors, with delayed physical findings—such as boggy nasal mucosa, mouth breathing, wheezing, eczema, or urticaria—appearing 24-72 hours after ingestion. IgG levels may help identify offending foods.

Eliminate the problem foods from the patient's diet for 90-120 days, then perform a careful challenge with the food, and urge minimal intake of problem foods thereafter, he suggested.

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► Chronic illness. Some patients complain that they never had weight problems until diagnosed with chronic fatigue syndrome, fibromyalgia, lupus, rheumatoid arthritis, irritable bowel syndrome, or other-fat, non-

In these patients, the liver's detoxification abilities are impaired, leaving higher levels of toxins in the body that compromise fat metabolism, he said. Eliminate common dietary allergens such as gluten for 4 weeks and support liver detoxification with a hypoallergenic ricebased protein formula containing selected nutrients, Dr. Rigden recommended.

He disclosed that he has no association with the companies that make the products he discussed.

FPs Fall Short in Diagnosing Obesity in Overweight Kids

TUCSON, ARIZ. — Family physicians are failing to diagnose obesity in a substantial number of their overweight pediatric patients.

A review of 100 pediatric charts from two family medicine residency outpatient clinics identified 20% of pediatric patients as overweight and 19% as being at risk for overweight.

Yet only 28% of the cases were correctly identified and documented, Dr. Jennifer Keehbauch and her colleagues reported in a poster at the annual meeting of the North American Primary Care Research Group. It has been reported in previous literature that pediatricians recognize only about 29% of their overweight patient population.

The pilot data were based on 100 charts randomly selected from a computer-generated list of well-child visits. The patients, aged 2-17 years, were identified as Hispanic (36%), white (30%), African American (8%), and other (26%).

Overall, 79% of the overweight children did not have appropriate screening for hyperlipidemia or glucose intolerance, and 21% had blood pressure above the 95th percentile of blood pressure for their sex and age.

It's unclear whether the physicians are failing to recognize obesity or are reluctant to label children as obese, said Dr. Keehbauch, assistant director of family practice residency, Florida Hospital, Orlando. One strategy for better identification of childhood obesity is an upgraded electronic health record (HER) system that generates and plots body mass index percentile for age.

The two clinics in the review use the EHR system from Epic System Corp., which calculates BMI, but plots only height and weight "A BMI of 19 in an adult might be normal, but in a child it might be obese. You have to plot the BMI percentile for age to get the diagnosis," she said.

Other EMR systems plot BMI percentile for age as well. Evidence supports the use of BMI percentile for age, but less than 15% of pediatricians report using it. The next phase of the study is a follow-up survey to determine awareness and utilization of the BMI percentile by health care providers at both clinics.

—Patrice Wendling

Fewer Meals, Minimal Constraints on Food Choices May Benefit Obese Kids

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BY BRUCE K. DIXON

Chicago Bureau

INDIANAPOLIS — Obese children may eat less when offered larger, less frequent meals, Dr. Rinku Mehra reported at the annual meeting of the Midwest Society for Pediatric Research.

"The preliminary results of our study suggest that altering meal frequency affects satiety in obese children, but not in the way we had hypothesized," Dr. Mehra said.

The researchers' hypothesis was based largely on previous studies of adults in which smaller, more frequent meals increased satiety and cut total caloric consumption. "Obese children may experience greater satiety when offered larger meals without snacks," said Dr. Mehra of the University of Iowa Hospitals and Clinics in Iowa City.

The results of the 2-day study also suggest that the more restrictions parents place on certain foods, the more of those foods children will eat when unsupervised. In this case, the food in question was ice cream.

During the study, 18 normal weight and 8 obese children were admitted fasting to the General Clinical Research Center.

The normal children's body mass index (BMI) ranged from the 25th to the 85th percentile and produced an average BMI score of 0.31. In the obese cohort, BMIs were all greater than the 95th percentile and the average score was 2.37.

The children were aged 6-10 years.

On the first day, subjects were randomly assigned to diet A (three meals and two snacks) or diet B (three meals). The energy distribution was the same in all meals: 14% from protein, 32% from fat, and 54% from carbohydrate per the current National Health and Nutrition Examination Survey guidelines for childhood reference intakes

On the second day, they got the opposite meal pattern. At the end of each day, all the children were offered eight scoops of ice cream and were told they could eat as much as they wanted. Parents were given child feeding questionnaires (CFQs) to complete, said Dr. Mehra.

"Obese children consumed more ice cream when given frequent small meals than when given less frequent, larger meals. Despite receiving equivalent meals adjusted for energy requirements, obese children ate more ice cream than nonobese children. Also, the parents of heavier children had higher restriction scores on the CFQ than parents of normal weight children—and higher parental restriction scores, regardless of the child's weight, correlated with higher ice cream consumption," said Dr. Mehra.

"High levels of parental control and increased restriction may influence the development of the child's self-control based on hunger and satiety cues, and less frequent meals and less parental restriction may improve satiety in obese children," he said.