Endocrine Disorders Overlooked During Cancer Tx

BY JEFF EVANS  Senior Writer

WASHINGTON — The focus on short-term goals during cancer treatment can overshadow care for diabetes and other endocrine disorders. "It may be that they may have to acquire as they undergo treatment. When cancer patients return to the community after successful treatment at a cancer center, it’s easy for their primary care physicians to lose focus on their other medical problems, because cancer becomes the focus when they’re at the cancer center," Robert F. Gagel, M.D., said at a consensus conference on patient safety in a study on complete remission and median survival, compared with patients who did not have hyperglycemia (Cancer 2004; 100:1179-85).

The reason for higher mortality among patients with hyperglycemia is unknown, although it might be due to higher rates of infection. The hyperglycemic patients in the leukemia study developed sepsis or any complicated infection at higher rates than did patients without hyperglycemia.

Many cancer patients, especially those with breast cancer, have a high risk for osteoporosis. The major contributor to bone loss in patients with breast cancer is hypogonadism in the 50% or more of women who develop ovarian failure after chemotherapy. Of 49 women in a study who had early-stage breast cancer treated with adjuvant chemotherapy, 35 developed ovarian failure and had a rapid progression of bone loss 6 and 12 months later (J. Clin. Oncol. 2001;19:3303-5). About 14% of breast cancer survivors in the Women’s Health Initiative study had a fracture during less than 5 years of follow-up.

The introduction of aromatase inhibitors in the last 2 years has contributed to the risk of osteoporosis in breast cancer patients, Dr. Gagel said. Aromatase inhibitors block conversion of androstenedione to estrone, or testosterone to estradiol, thereby lowering estrogen levels further.

In a recent trial comparing the aromatase inhibitor anastrozole (Arimidex) with tamoxifen, anastrozole significantly decreased spinal and hip bone mass after a median follow-up of 33 months, compared with tamoxifen. The rate of fractures was also significantly higher with anastrozole than with tamoxifen (Lancet 2002;359:2313-9). Follow-up at 47 months did not show continued worsening of bone mass or fracture risk (Cancer 2003;98:1802-10).

The conference was cosponsored by the American College of Endocrinology and the American Association of Clinical Endocrinologists.

Detection and Reversal of Hypoglycemia Unawareness

KEYSTONE, Colo. — Hypoglycemia unawareness is a common problem constituting a major risk factor for severe hypoglycemic episodes involving seizures or coma, Georgeanna Klingensmith, M.D., said at a conference on management of diabetes in youth sponsored by the University of Colorado.

Moreover, hypoglycemia unawareness is likely to become even more frequent as physicians strive to meet tighter glycated hemoglobin goals in order to reduce the long-term risks of diabetic retinopathy and nephropathy, predicted Dr. Klingensmith, professor of pediatrics at the university.

The good news is, hypoglycemia unawareness is reversible simply by avoidance of hypoglycemia for 7-21 days. "I usually find that 7-10 days after setting target blood glucose levels higher, the patient can regain hypoglycemia awareness. Then you can re-set the blood glucose targets. So if we can correct hypoglycemia unawareness, we may be able to avoid hypoglycemia in the first place," she explained.

Before you can set about reversing hypoglycemia unawareness, however, you first have to suspect its presence. That’s why it’s vital to ask type 1 diabetic patients about hypoglycemic symptoms at every visit. "I’m kind of a nut case on this, because I think hypoglycemia unawareness is more common than we expect and really is a cause of severe hypoglycemia," she added.

Symptoms of neuroglycopenia suggest a patient is experiencing hypoglycemia unawareness. So do hypoglycemic symptoms occurring at a blood glucose level of less than 60 mg/dL. Hypoglycemia unawareness results from CNS adaptation to hypoglycemia, which increases levels of the glucose transport protein GLUT1 mRNA in the ventromedial hypothalamus. The result is preferential brain glucose uptake. The brain doesn’t sense hypoglycemia is occurring, hence, it no longer releases norepinephrine as a counterregulatory response.

Nocturnal hypoglycemia is a major cause of hypoglycemia unawareness. In one representative study of which 47 children with type 1 diabetes underwent continuous blood glucose monitoring for a mean of 70 hours, 83% experienced at least one episode of unrecognized nocturnal hypoglycemia.

Drug intensification was defined as the addition of a new oral drug, an increase in the dose of an oral drug, or the initiation of insulin. "We were looking for any increase in medication. It didn’t matter if it was inadequate, as long as there was some change indicating the physician had responded to the test result," Dr. Shah told this newspaper.

Half the patients were seeing endocrinologists, internists, or geriatricians; 63% of patients seeing primary care physicians. Although all physicians were about equal in terms of adding new oral drugs or increasing the dosage of oral drugs, there was a difference in their approach to initiating insulin.

Of patients seeing endocrinologists, internists, and geriatricians, 9% were started on insulin, vs. 2% of patients seeing primary care physicians, he said.

The phenomenon of clinical inertia has been described in the context of other conditions such as hypertension and hypercholesterolemia, as well as in other aspects of diabetes care, he said. "In this study, there is no question that a lack of medication adjustment in response to a poor HbA1c result could partly be the choice of the patients who were already taking a lot of medications and didn’t want to add another," he said.

"But many times, it is also the physicians," Dr. Shah added. "They get distracted by other things that they need to address with the patient, or they may interpret a result as slightly better, when really it is not."

‘Clinical Inertia’ Contributes to Failures of Diabetes Management

BY KATE JOHNSON  Montreal Bureau

QUEBEC CITY — The management of diabetes is compromised by “clinical inertia” in responding to a patient’s elevated hemoglobin A1c levels, according to a new study.

“Over half of the patients in our study were not prescribed any change at all in their medications after a poor HbA1c reading,” said Biju Shah, M.D., of the Institute for Clinical Evaluative Sciences, Toronto. “This is what has been described in the literature as the phenomenon of clinical inertia—when the physician recognizes a problem but doesn’t do anything about it.”

Dr. Shah’s retrospective study analyzed the responses of physicians to their diabetes patients’ elevated HbA1c results. He presented the findings in a poster at the joint annual meeting of the Canadian Diabetes Association and the Canadian Society of Endocrinology and Metabolism.

The 1,170 patients were aged 65 years or older, had non-insulin requiring type 2 diabetes, and had an HbA1c level above 8%, indicating poor glycemic control. A comparison was made of the medications prescribed to each patient during the 4 months preceding the unfavorable HbA1c test result and during the 4 months after the test.

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