

**Acknowledgments**— We thank Dr. Antonio Muroli, Laboratori Guidotti SPA, Italy, for providing data from Intercontinental Marketing Services.

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COMMENTS AND RESPONSES

**Patient Self-Management of Insulin Doses in the Hospital**

*This letter may seem “far out,” but in my experience and that of some of my colleagues, with select patients, usually type 1’s, patient self-management (with physician oversight) yields better glycemic results (and less patient and physician anxiety) than if insulin dosing is left to the vagaries of the busy floor staff. Getting the hospital administration to allow this is often the biggest challenge.*

Reading the exchange of letters in the December 2005 issue regarding the management of inpatient hyperglycemia made me reflect on personal experiences as a hospital patient (1,2). In past years, as surgeons and cardiologists tended to their more immediate tasks, my diabetes was often relegated to a secondary and sometimes seemingly nonexistent

concern. I was frustrated and angered by substitution of the sliding-scale for my normal insulin regimen, especially as my blood glucose spiraled out of control. It is encouraging that this critical issue is receiving increased attention.

My own bouts with surgeries at the University of Pittsburgh Medical Center this past winter highlight the benefits of focusing on inpatient diabetes management. Not only did I demand a consult with my endocrinologist and her staff to develop and implement a treatment plan for my hospital stay, I requested intravenous insulin infusions during surgery and in the recovery room and intensive care unit. The growing evidence supporting the value of infusions is overwhelming.

It is sometimes easy, however, to overlook another effective tool for in-hospital diabetes management—the patient. Undoubtedly, the most helpful step for me was continuing to manage my own insulin pump therapy while in the hospital. Clearly, every patient demonstrating proficiency, whether using a pump or multiple insulin injections, should be encouraged to continue self-management on the nursing floor. For me, this alleviated the anxieties often felt by patients when their diabetes management routines have been disrupted. And the results were phenomenal. My blood glucose stayed within normal ranges almost the entire time! With the help and oversight of my consulting endocrinologist and certified diabetes educators, self-management presented few difficulties for me and relieved the surgical staff of this additional responsibility. Many of the nurses and other hospital staff were actually curious to learn more about insulin therapy and, particularly, pump therapy.

I kept my own glucose monitor and a supply of strips with me, as well as replacement batteries and other pump supplies. While staff would routinely check my blood glucose levels, the timing was somewhat irregular and did not always correlate with meals. I carefully recorded monitor readings, food intake, and insulin dosing to review with my consulting diabetes specialists. I also maintained a cache of glucose tablets and fruit juice to treat inevitable lows. Although these were available on the hospital floor, I was concerned about getting the immediate attention of the nursing staff during a sudden hypoglycemic episode. Nevertheless, I reported every incident and the actions taken for entry into my medical records.

In addition, I reminded every hospital

staff member about my diabetes and my treatment plan, and I always had a family member available to do this when I was unable to speak for myself. While this information was contained in my chart, it is unreasonable to expect that everyone remembers every detail all the time. These approaches kept my diabetes in the forefront and dramatically enhanced each hospitalization.

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**Acute Neuropathic Joint Disease: A Medical Emergency?**

Response to Tan et al.

We read with some interest the commentary by Tan et al. (1) on the management of the Charcot foot in diabetes. While we agree entirely that this condition should be ranked as a medical emergency, because failure to act quickly can lead to irreversible adverse consequences, we do not agree that the evidence is available to support uncritical use of bisphosphonates. The only blinded trials conducted so far did not demonstrate any overt improvement in long-term prognosis (2,3). There is much suggestive evidence to favor the consideration of bisphosphonate use, but it is not currently accepted by all authorities that this therapy is essential.

A number of other treatments also deserve consideration (4,5). For example, intranasal calcitonin and tumor necrosis factor- $\alpha$  antagonists may prove useful, although the efficacy of both has yet to be established in controlled trials. In the absence of evidence to support the use of

specific treatments, it is accepted by all with a specialist interest in this field that the mainstay of emergency management is the immediate institution of effective offloading, preferably in a total contact cast. Offloading results in protection of the bones and joints of the foot, as well as amelioration of the underlying inflammatory process.

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## Acute Neuropathic Joint Disease: A Medical Emergency?

Response to Jeffcoate et al.

We thank Jeffcoate et al. (1) for their comments on our article (2). To summarize, they agree that neuropathic joint disease (NJD) is in-

deed a medical emergency, but they disagree that bisphosphonates are of proven efficacy. One of the major problems for clinicians at the moment is the failure to recognize early NJD based on several considerations, including other possible diagnosis at presentation, the presence of pain, normal radiographs, and patients presenting to nonendocrinological specialists. Therefore, at the time of initiation of therapy, damage may already be well established and, furthermore, joint offloading with prolonged casting has several drawbacks (3).

It was not the intention of our article to convey the idea that the very early initiation of bisphosphonate therapy before radiographic damage would definitely halt disease. We agree with Jeffcoate et al. that further work needs to be done in this regard. However, given the data from trials in NJD, the safety profile and costs of bisphosphonate therapy, and ease of administration, it would seem reasonable to prescribe these.

It is interesting to note that bisphosphonates may have some structural modification properties in the more common garden variety of osteoarthritis (4) and also some evidence of symptom control (4,5). However, based on the magnetic resonance imaging (MRI) observations that the earliest stages of NJD is strikingly associated with bone edema, which is also a predictor of progressive osteoarthritis joint deterioration in other sites (6), besides the ankle and foot, then it would seem prudent that attempts to inhibit osteoclast function may be of use.

To summarize, we feel that the MRI features of early NJD will allow for early intervention, including those suggested by the authors, at a stage before irreversible joint damage to see whether ultimately progressive joint damage can be prevented. We feel that the MRI observations in early disease have broad implications for raising awareness of the potential for early NJD diagnosis and for monitoring potential therapies.

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## Resistance to Insulin Therapy Among Patients and Providers: Results of the Cross-National Diabetes Attitudes, Wishes, and Needs (DAWN) Study

Response to Peyrot et al.

The recent article by Peyrot et al. (1) concerning the attitudes of both patients and providers with respect to insulin therapy raises some potentially important issues about barriers to an important treatment in diabetes. However, their statement that “U.S. physicians were significantly more disposed to delay insulin therapy than physicians in all other countries . . .” (1) appears to contradict