COMMENTS AND RESPONSES

Response to Comment on: Lipsky and Berendt. Hyperbaric Oxygen Therapy for Diabetic Foot Wounds: Has Hope Hurdled Hype? Diabetes Care 2010; 33:1143–1145

I thank van der Staal et al. (1) for their comments on our editorial (2). It is gratifying, and not surprising, to hear that hyperbaric oxygen therapy (HBOT), like many other aspects of health care, is less expensive in the Netherlands than in the U.S. Data from the U.K. also show that they can provide HBOT at a similar cost (£40/session, 2006 data) (3). Most hyperbaric therapy for lower extremity wounds in the U.S. is probably provided to patients who meet the Centers for Medicare and Medicaid Services–defined criteria, i.e., a wound classified as Wagner grade III or higher that has failed to improve after at least 30 days of adequate standard wound therapy. However, a Google search for hyperbaric treatment centers for diabetic foot wounds reveals thousands of "hits" from for-profit centers that will, for a fee, treat patients who may not meet these strict criteria. Not only does this lead many patients to waste money on unnecessary (or certainly unproven) HBOT for their wounds, it may delay them from receiving other needed treatment, e.g., debridement, pressure-offloading, antibiotic therapy, and revascularization.

The authors state that HBOT in the Netherlands "appear[s] to be cost-effective." I would like to see the data that support this assertion. Although Löndahl et al. (4) have published follow-up analyses of their data demonstrating that HBOT improves quality of life, they have not presented data on cost-effectiveness. One study found that adjunctive HBOT produced an incremental cost per quality-adjusted life-years at year 1 of $27,310 and at year 12 of $2,255 (2001 values) (5). A recent report by the Canadian Agency for Drugs and Technologies in Health did conclude that HBOT for diabetic foot ulcers is cost-effective compared with standard methods of care but pointed out that even if seven-person HBOT chambers were used, Canada would need up to an additional 35 of these expensive machines (not to mention the staff to run them) (6). It is also noteworthy that despite this finding, adjunct HBOT is rarely used by Canadian providers, largely because of inadequate knowledge.

Although I agree that clinical evidence is growing for the effectiveness of HBOT in appropriately selected patients with a diabetic foot ulcer, I think we need more data on its cost-effectiveness. I would welcome such studies from various health care systems.

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