their degree of satisfaction with the pen on a scale from 0 (worst) to 5 (best). Overall, 9% of patients rated the pen as 5, 38.4% as 4, 26.4% as 3, 11.7% as 2, 8.8% as 1, and 2.9% as 0. A significant amount (61.7%) of subjects exchanged their OptiPen Pro-1 for an insulin syringe or insulin detemir.

In the U.K., the MHRA has issued an alert about possible problems with the OptiPen Pro-1. Possible damage to an internal component of the pen during assembly could mean that the dosage button fails to engage at the end of an injection. This could lead people to believe that an injection has not been successful and, therefore, subsequently duplicate the dose. The MHRA asked all National Health Service boards (confidential health advice and information service for Scotland) and pharmacists to ensure that patients using the system were aware of the potential for dose button failure (1). The leakage and dosage button problems observed with OptiPen Pro-1 raise uncertainty as to whether diabetic patients should continue to use this product.

DAMLA GOKSEN, MD
SUKRAN DARCAN, MD
MUAMMER BUYUKINAN, MD
EMINE KURT, NP

From the Department of Pediatric Endocrinology, Ege University Faculty of Medicine, Bornova, Izmir, Turkey.

Address correspondence to Damla Goksen, MD, Ege University Faculty of Medicine, Department of Pediatric Endocrinology, Mithatpasa cad., no. 1114/5, 35290 Guzelyali-Izmir, Turkey. E-mail: damla.goksen@ege.edu.tr.

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Improvement of Type 2 Diabetes in a Lung Cancer Patient Treated With Erlotinib

A 72-year-old woman, with BMI 30 kg/m^2, had established type 2 diabetes for 2 years before her diagnosis of non–small cell lung cancer (NSCLC). Initially, her HbA_{1c} (A1C) was 10.3%. After treatment with pioglitazone and glyburide for 1 year, she attained an A1C of 8.2%, with average fasting glucose levels of 130–160 mg/dl. She presented to our care with metastatic NSCLC. After two cycles of chemotherapy with carboplatin and paclitaxel, her tumor progressed, and subsequently her treatment was changed to 150 mg erlotinib once a day. Within the first 4 weeks of erlotinib use, the patient noted frequent episodes of hypoglycemia, and her premeal glucose levels decreased to <90 mg/dl. Notably, her appetite and nutritional intake were not changed, her weight remained stable, and no other medications known to affect glucose metabolism had been introduced. A morning cortisol level and renal and hepatic functions were also found to be normal. Glyburide at 10 mg twice a day was eventually discontinued. Her fasting glucose levels stabilized at ~90–110 mg/dl. The patient achieved a small reduction in the size of her tumor burden with erlotinib. After 8 months of erlotinib therapy, and while continuing 30 mg pioglitazone once a day, her A1C was measured at 6.5%. Unfortunately, 1 month later, symptomatic leptomeningeal central nervous system lesions progressed and the patient was transferred to a hospice program.

Erlotinib (Tarceva; OSI Pharmaceuticals) is an analinoquinazolone inhibitor of the epidermal growth factor receptor (EGFR) tyrosine kinase and has been approved as second-line treatment in NSCLC (1). Hypoglycemia or glucose derangements were not reported as side effects in the phase III randomized trial (1) or in the available literature of these specific tyrosine kinase inhibitors (2). However, of interest to this case, the crystal structure of the kinase activation loop of EGFR adopts a conformation similar to that of the phosphorylated active form of the kinase domain of the insulin receptor (3). Downstream targets of EGFR, such as Akt (protein kinase B) and extracellular signal–regulated kinase, are also involved in the complex pathway of insulin signaling (4). Of note, regression of type 2 diabetes has been described with the use of another tyrosine kinase inhibitor, imatinib mesylate (Gleevec; Novartis) (5). Further investigation of the possible connection of EGFR-mediated pathways active in cancer and in the pathogenesis of diabetes as well as the possible use of analinoquinazolone EGFR inhibitor compounds in hyperglycemic states may be warranted.

DANIEL B. COSTA, MD
MARK S. HUBERMAN, MD

From the Division of Hematology/Oncology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts.

Address correspondence to Daniel B. Costa, MD, Division of Hematology/Oncology, Beth Israel Deaconess Medical Center, 330 Brookline Ave., Rabb 430, Boston, MA 02215. E-mail: dbcosta@bidmc.harvard.edu.

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Insulin Allergy and Immunologic Insulin Resistance Caused by Interleukin-6 in a Patient With Lung Cancer

Simultaneous occurrence of insulin allergy and immunologic insulin resistance has been reported in a few cases (1). A 62-year-old man with type 2 diabetes, who had been treated with insulin (premixed insulin of 30% aspart and 70% protaminated insulin aspart) for 3 months, noticed urticariform erythema and induration of the skin at the insulin-injection site. Erythema appeared imme-