

15161

31760

Letters

- betes receiving sulfonylurea therapy. *Am J Med* 89:811-13, 1990
5. Rett K, Wicklmayr M, Dietz GJ: Hypoglycemia in hypertensive diabetic patients treated with sulfonylureas, biguanides and captopril (Letter). *Lancet* 319:1609, 1988
 6. McMurray J, Fraser DM: Captopril, enalapril and blood glucose (Letter). *Lancet* 1:1035, 1986
 7. Helgeland A, Strommer R, Hagelund CH, Tretli S: Enalapril, atenolol and hydrochlorothiazide in mild to moderate hypertension: a comparative multi-center study in general practice in Norway. *Lancet* 1:872-75, 1986
 8. Lithell HO, Pollare T, Berne C: Insulin sensitivity in newly detected hypertensive patients: influence of Captopril and other antihypertensive agents on insulin sensitivity and related biological parameters. *J Cardiovasc Pharmacol* 15:S46-52, 1990

* Milk Allergy Masquerading as Insulin Allergy

DAVID S.H. BELL, MB

Although with modern purified and human insulins the incidence of both local and systemic insulin allergy is decreased, these reactions still occur (1). Substances other than insulins implicated as a cause of insulin allergy include impurities in the alcohol used to cleanse the injection site, protamine, and zinc (1). A case is described in which the allergy was caused by injected milk protein.

An 18 yr-old previously healthy white male showed the classic symptoms of diabetes and was admitted to his local hospital. His diabetes was controlled on insulin and he received survival-skill

level diabetes education. During his hospitalization, he felt well and had no allergic reactions to subcutaneously injected insulin.

After his discharge from the hospital, his blood sugars rose dramatically and did not decrease with extra subcutaneous injections. In addition, at the site of his "cloudy" insulin injections but not at his "clear injections," he developed a macular rash 2 h after injection which lasted 36 h. Because of these difficulties, he sought help at our institution.

After arriving at the diabetes clinic his serum glucose was 453 mg/dl. He was asked to give 5 U of regular

insulin subcutaneously. On producing his "insulins" it was discovered that he was using two normal saline solutions; one was clear and the other had a cloudy appearance and obviously had been used to practice mixing insulin. He had decided not to purchase the human insulin that had been prescribed until the "insulins" that he had left the hospital with had been used and he had thus been injecting normal saline solutions. By contacting the hospital where he had been initiated on insulin 2 wk previously, it was discovered that one vial of saline had been made to resemble NPH insulin by adding milk.

After treatment with split-mixed regular and NPH human insulin, his diabetes was easily controlled and his skin lesions disappeared within 36 h.

This case illustrates the need for clear discharge instructions to the patient with diabetes, especially those with a recent onset of diabetes and initiation of insulin therapy.

References

1. Galloway JA, deShazo RP: The clinical use of insulin and the complications of insulin therapy. In *Diabetes Mellitus: Theory and Practice*. Ellenberg M, Rifkin H, Eds. 3rd ed. Chapt. 25, New Hyde Park, NY, Med. Exam., 1983, p. 519-38

FROM THE SCHOOL OF MEDICINE, DEPARTMENT OF MEDICINE, THE UNIVERSITY OF ALABAMA AT BIRMINGHAM, BIRMINGHAM, ALABAMA.

ADDRESS CORRESPONDENCE AND REPRINT REQUESTS TO DAVID S.H. BELL, MB, 1808 7TH AVENUE SOUTH, BIRMINGHAM, AL 35294.