COVER LETTER

Response to Letters to the Editor

Re: Research Letter in JAMA 2017 Nov14; 318(18);1825-6


Correspondence Author:

Edward Lichten M.D.
Assistant Clinical Professor, Wayne State College of Medicine
Fellow, American College of Obstetricians and Gynecologists
Fellow, American College of Surgeons
Email: drlichten@yahoo.com
Tel: 248.593.9999

word count 399
This epidemiological study\textsuperscript{1} shows that physicians must rethink and institute other therapies to improve glycemic control. James Sowers, M.D. and I in our I.R.B.\textsuperscript{2} study of 13 brittle IDDM men and 23 AODM men on oral agents, observed parenteral testosterone rapidly reduced insulin requirements in Type I by 50\%, reduced oral agents usage in Type II, and prevented hypoglycemic symptoms even with blood glucose of 50 mg/dl.

All diabetic men are hypogonadal; the lowest levels of testosterone in diabetic men increases their mortality 2-fold.\textsuperscript{3} The CDC admonishes that “low concentrations of total testosterone and SHBG were strongly associated with increased likelihood of having metabolic syndrome, independent of traditional cardiovascular risk factors and insulin resistance.” By failing to prescribe FDA approved testosterone for hypogonadism, the physician risks omitting treatment in this population. Measure three biomarkers of bio-available testosterone: total testosterone, sex-hormone-binding globulin and the ratio of these two – the Free Androgen Index. Bring these into normal ideal range using the biomarkers as guides. Parenteral testosterone raises serum testosterone and all forms of stanozolol lowers SHBG—as both raise the FAI they both improve glycemic control. D. Kapoor\textsuperscript{4} confirms that 100mg of testosterone intramuscularly weekly lowered hemoglobin A1c by 2%.

Physicians should be made aware that “administration of testosterone to centrally obese hypogonadal middle-aged men has improved insulin sensitivity,” yet may precipitously drop insulin requirements and produce transient hypoglycemia. When improved glycemic control is realized, there is an increase in total testosterone, FAI and decrease in SHBG. The corollary that we observed is also true; supplementing parenteral testosterone will increase FAI and improve glycemic control.
Other major studies reached different yet, overall positive conclusions about anabolic therapy use: 1) testosterone patch lowers HgB-A1c by 2% and 2) 250mg testosterone undeconate every two weeks improves diabetic parameters but, not HgB-A1c in the first 4 months of treatment.

There is a need to focus on implementing other treatments that rely on biomarkers. Anabolic therapy treats the insulin resistance that precede degradation of the HgB-A1c. One in three children born today will be part of the diabetic dilemma. Should not the directive we pursue start with 50-years of medical and scientific observations of anabolic therapy?

References:

1. Shahraz S, Research Letter in JAMA 2017 Nov 14; 318(18);1825-6