Case Study Responses

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Note: Readers are encouraged to visit www.InsulinJournal.com to review the details of a Case Study published in the April 2009 issue of *Insulin*.

This was the case of a 56-year-old man with poorly controlled type 2 diabetes mellitus and erectile dysfunction (ED). The patient admitted poor compliance with his oral hypoglycemic agents. It is noteworthy that the patient did not volunteer information about his ED until he was specifically asked. Inquiring about ED should be part of the review of systems for every male patient with diabetes. Both peripheral vascular disease and neuropathy contribute to this condition, which is 3 times more common in men with diabetes than in those without diabetes.

Question 1. Which of these factors contributes **the least** to the patient's ED?
Answer: d. Medication-related adverse effects of insulin.
Hyperglycemia, dyslipidemia, and hypertension all contribute not only to vascular disease, but also to ED.[1] In addition, testosterone deficiency in the stress situation of prolonged hyperglycemia is detrimental to erectile function.[2] On the other hand, insulin is not associated with ED, and treating this patient's diabetes with insulin may help to improve his ED.

Question 2. Which of the following measures will have **the least** impact on the patient's ED?
Answer: a. Daily oral administration of bovine testicular extract.
Folk medicine includes many remedies that purportedly benefit erectile function, but little to no evidence is available to support their use. The phosphodiesterase type-5 (PDE-5) inhibitors (sildenafil, tadalafil, and vardenafil) have all been clinically tested and found to be efficacious treatments for ED with good safety profiles.[3] It should be noted that patients with diabetes often require the highest dose of PDE-5 inhibitors right from the start and that repeated use may produce better results. Improved glycemic control, which demands more frequent testing of blood glucose levels, and lifestyle changes leading to weight loss can also improve erectile function.[4] This information can be used to motivate patients. In this case, a brief call to the patient's insurance company revealed that the patient had been misinformed and that test strips for a different glucometer were indeed being covered.

Question 3. What would an initial assessment of this patient's ED entail?
Answer: a. Administering a 5-question "Sexual Health Inventory for Men" questionnaire.
This questionnaire, developed by Cappelleri et al,[5] helps clinicians to assess their patient's ED more objectively. The questionnaire, which can be downloaded from the Web site http://www.mayoclinicproceedings.com/content/82/10/1214/F3.large.jpg, provides a numeric score indicating the severity of the condition. None of the other answers to this question would have been useful in an initial evaluation of ED.

Question 4. ED is believed to be a predictor of which of the following conditions?
Answer: b. Cardiovascular disease.
Urologists have long noticed that ED is not only associated with risk factors for cardiovascular disease and peripheral artery disease (eg, hypertension, diabetes, obesity, dyslipidemia, smoking),[1] but also frequently precedes myocardial infarction and stroke by years.[6] Reasons include endothelial dysfunction and partial arterial obstruction from atherosclerosis, which become detectable as ED long before other symptoms (eg, angina) appear.

REFERENCES

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