

## Quadrant Medical Education Survey

**Case #1:** PL, a 57-year-old patient of yours with known coronary artery disease (CAD), comes to your office for an annual check-up. He had a CABG 1 year ago, with no recent episodes of chest pain since then. He was recently diagnosed with hypertension, but has found it difficult to control even with various medications that you have prescribed. PL recently began having erectile dysfunction (ED) and is concerned because it is having a negative impact on his marriage. He is using a beta blocker and an ACE inhibitor for his hypertension, and is not taking any other medications. He is a non-smoker and only drinks socially. His physical exam is notable for central obesity, but is otherwise unremarkable. His BMI is 30\* and blood pressure is 143/91. Serum electrolytes are: Na<sup>+</sup> 138 mEq/L, K<sup>+</sup> 3.7 mEq/L, Cl<sup>-</sup> 102 mmol/L, HCO<sub>3</sub><sup>-</sup> 23 mmol/L, BUN 11 mg/dL, creatinine 0.9 mg/dL. A random urine sample shows 2+ glucose, but is otherwise normal.

\*(BMI: 18-24.9 normal; 25.0-29.9 overweight; ≥ 30 obese)

**1. Which of the following is true regarding this patient's ED?** (select only one)

- Since he has ED, he has a slightly greater risk of having a myocardial infarction than someone who does not have ED
- Since he has ED, he has a significantly greater risk of having a myocardial infarction than someone who does not have ED
- His ED does not indicate that he is at any additional risk of having a myocardial infarction than someone who does not have ED

**2. Which of the following additional tests would you order at this time?**

(select all that apply)

- CBC
- Fasting blood glucose
- Thyroid function
- Fasting lipid profile

**Case #2:** RM, a 44-year-old man presents to your office with complaints of difficulty in achieving and maintaining an adequate erection. His medical history is remarkable for hypertension which is being treated with a beta-blocker. RM is not taking any other medications at this time. His physical exam is notable for central obesity, but is otherwise unremarkable. His waist circumference is 41 inches, his BMI is 30\* and blood pressure today is 134/88. His fasting lipid profile shows: total cholesterol is 223 mg/dL, HDL is 38mg/dL, LDL is 136 mg/dL, and triglycerides are 246 mg/dL. Fasting blood glucose is 112 mg/dL.

\*(BMI: 18-24.9 normal; 25.0-29.9 overweight; ≥ 30 obese)

**3. Which of the following is true regarding this patient's ED and his risk for diabetes mellitus?** (select only one)

- This patient's ED is not a predictor for diabetes
- This patient's ED is a likely marker for diabetes
- This patient's ED is a strong marker for diabetes

**Case #2 continued:** You decide to start this patient on a PDE-5 inhibitor.

**4. If this patient eventually developed diabetes, what advice would you give this patient if he continued to have ED?** (select only one)

- If this patient had diabetes, there is only a 50% chance that a PDE-5 inhibitor would improve

his ED even if his glucose levels were well-controlled

Using a PDE-5 inhibitor for ED will be more effective if his glucose levels are well-controlled

Controlling glucose levels has no effect on the efficacy of PDE-5 inhibitors

**Case #3:** BL, a 59-year-old with known CAD, comes to your office for an annual checkup. Initially, he does not complain of any symptoms. However, upon further questioning about his sexual history, you discover that he has erectile dysfunction. BL's previous medical history is otherwise unremarkable. He has been smoking 1 pack per day for the last 20 years, despite your continuous advice to him to quit smoking. Also, he is not very physically active. His BMI is 32\*, and his blood pressure is 133/86. His physical exam is unchanged from his last visit. BL is aware of the effects of smoking on CAD, but he asks you about its effects on his erectile function.

\*(BMI: 18-24.9 normal; 25.0-29.9 overweight;  $\geq 30$  obese)

**5. What advice do you give him regarding smoking and ED?** (select only one)

Smoking is a risk factor for ED, but smoking cessation probably will not restore erectile function

Smoking is a risk factor for ED, and smoking cessation may help restore his erectile function

Smoking is not a risk factor for ED, but smoking cessation will probably help him decrease his cardiovascular risks

**6. What advice do you give him regarding his weight?** (select only one)

A sedentary lifestyle and obesity increase his risks of ED, so an exercise regimen and weight loss may improve or reverse his ED

Being obese does not have any effect on his risk of ED, so increasing his physical exercise and losing weight will probably not improve his ED

This patient's weight would only be considered a risk factor for ED if his BMI is  $>35$

**Case #4:** AG is a 52-year-old man who has had erectile dysfunction for a few years, but was too embarrassed to discuss it with you. However, he is now seeking treatment because he realizes that it is a common problem and he desires sexual intimacy again with his wife. AG's medical history is only notable for mild depression, for which he is taking fluoxetine. He is not taking any other medications at this time. His BMI is 22 and his blood pressure today is 124/74. His physical exam is unremarkable and unchanged from his last visit.

\*(BMI: 18-24.9 normal; 25.0-29.9 overweight;  $\geq 30$  obese)

**7. Which of the following is your next step in management?** (select only one)

Treat his ED with a PDE-5 inhibitor and expect for his ED to improve but for his depression to actually worsen slightly with this medication

Treat his ED with a PDE-5 inhibitor and expect for his ED to likely respond and for his mood to improve

Do not treat his ED with a PDE-5 inhibitor until he has had further cardiac testing

Do not treat his ED with a PDE-5 inhibitor since these drugs do not work with SSRI-induced ED

**8. Which of the following antidepressants would you consider switching this patient to in order to help improve his sexual functioning?** (select only one)

Sertraline

Nortriptyline

Bupropion

Escitalopram

**Case #5:** JT is a 60-year-old with BPH who comes to you for advice about what to do since he has not been able to enjoy sexual intercourse over the past few months because he has erectile dysfunction. Both he and his wife have been quite frustrated. He has seen advertisements on television about different medications that can treat his problem and wants to know if these medications can help him. JT is a non-smoker and has been using an alpha blocker for his BPH symptoms for several years without any problems. He has no other medical problems. His BMI is 29. Blood pressure is 128/75.

\*(BMI: 18-24.9 normal; 25.0-29.9 overweight;  $\geq 30$  obese)

**9. Which of the following is true regarding use of a PDE-5 inhibitor in this patient? (select only one)**

- Using a PDE-5 inhibitor is contraindicated in this patient since he is on an alpha blocker due to the risk of orthostatic hypotension
- Starting a PDE-5 inhibitor in this patient at any dose is a good choice for this patient
- Since he has been stable on an alpha blocker for years, starting a PDE-5 inhibitor is a reasonable choice, as long as it is started at the lowest dose and titrated upwards
- Since he has BPH and is on an alpha-blocker, he should use a second-line more invasive treatment such as penile injections with alprostadil

**Case #5 continued:** JT has heard some reports in the news about PDE-5 inhibitors affecting vision and asks you about it.

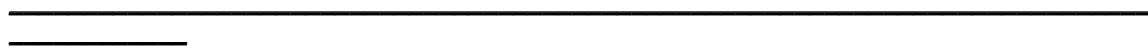
**10. What do you tell this patient regarding PDE-5 inhibitors and their effects on vision? (select only one)**

- PDE-5 inhibitors have been shown to increase the risk of nonarteritic anterior ischemic neuropathy (NAION) in men with no risk factors for that condition
- PDE-5 inhibitors have been shown to increase the risk of NAION in men who already have NAION in one eye
- PDE-5 inhibitors have not shown any effects on vision

**Case #5 continued:** JT's 57-year-old brother, who has a history of prostate cancer for which he has received external beam radiotherapy, comes to your office with the same complaint of ED. He wonders whether he should start using a PDE-5 inhibitor. He has no other medical problems. Physical exam, including BMI and blood pressure are normal.

**11. What advice do you give to this patient? (select only one)**

- A PDE-5 inhibitor is a reasonable first choice in treating this patient's ED
- Since this patient has a history of prostate problems, PDE-5 inhibitor use is contraindicated
- A vacuum tumescence device should be the first choice in treating this patient's ED
- Intracavernous injections should be the first choice in treating this patient's ED



**12. Which one of the following strategies do you use most commonly with your patients with ED? (select only one)**

- Provide counseling for the patient and patient's sexual partner
- Give printed educational materials about ED
- Provide an educational video which discusses ED
- Refer this patient to a sex therapist

