Title: PATIENT'S PREFERENCE OF PHOSPHODIESTERASE 5 INHIBITOR: SIDE EFFECTS VERSUS EFFICACY?

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Objective: To compare the frequency, duration and severity of side effects of the PDE5 inhibitors, and assess the importance of these side effects in the decision which PDE5 to use

Design: prospective study

Materials and Methods: In this prospective study, 23 men with erectile dysfunction (ED) after nerve sparing radical prostatectomy who had responded to 100mg of sildenafil were given 20 mg tadalafil (n=20) for 5 weeks and then 20 mg vardenafil (n=13) for 5 weeks. After 5 weeks of each PDE5 inhibitor, patients had one week without a PDE5 inhibitor. Each patient after a minimum of 4 attempts completed the Sexual Health Inventory for Men (SHIM) questionnaire. At completion of the study, patients were asked if they had a PDE5 inhibitor of choice and whether efficacy, side effect, or neither determined which PDE5 inhibitor they chose.

Results: Of 23 sildenafil responding patients, 20 completed a 5 week course of tadalafil, and 13 completed a five-week course of vardenafil. With sildenafil 14/23 (60.9%) experienced side effects: 4/23 (17.4%) headaches, 6/23 (26%) rhinitis, 2/23 (8.6%) flushing and 2/23 (8.6%) blue or blurred vision. The mean duration of side effects was 2.11 hours; the mean severity was moderate. With tadalafil 11/23 (47.8%) experienced side effects: 3/23 (13%) backpain/myalgia, 3/23 (13%) rhinitis, 3/23 (13%) palpitation, 1/23 (4.3%) dyspepsia. The mean duration of side effects was 16 hours; the mean severity was moderate. The three patients that experienced palpitations discontinued tadalafil before completing trial; the three patients with backpain/myalgia discontinued after completion of the trial. With vardenafil 3/13 (23%) experienced side effects: 2/13 (15.4%) Rhinitis, 1/13 (7.7%) headaches. The mean duration of side effects was 1.3 hours; the mean severity was mild. When asked, 14/23 (61%) had a clear choice of PDE5 inhibitor they preferred. Eight of the 14 patients (57%) made their preference on side effects, (5 had comparable efficacy, and 3 had lesser efficacy but fewer side effects). Six of 14 (42.8%) made their preference on efficiency, with sildenafil being the preferred PDE-5 inhibitor.

Conclusions: The side effect profile plays a significant role in the choice of a PDE5 inhibitor. When efficacy is equal, side effects determine the choice of the PDE5
inhibitor. The presence of severe side effects supercedes efficacy in the decision making. When side effects are negligible, the sildenafil has been the preferred PDE5.

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