Introduction & Methods: We evaluated the relation between various systemic risk factors and response to sildenafil. We identified 69 patients, who underwent bilateral nerve-sparing RP from 2001-2003. Sildenafil citrate 50-mg dose initially, later increased to 100 mg if no response was observed. Of the 69 patients, 31 (44.9%) responded to oral sildenafil (Group 1) and 38 (55.1%) had no response (Group 2). Variables analyzed include diabetes mellitus (DM), hypertension (HTN), hyperlipidemias, smoking and alcohol.

Results: In Group 1 (responders); 11/31 (35.5%) patients had one or more risk factors and 20/31 (64.5%) did not have any risk factors. The specific risk factors in Group 1 included: 3/31 from DM, 3/31 from HTN, 1/31 hyperlipidemias, 2/31 smokers and 3/31 were alcoholics. In Group 2 (nonresponders), 25/38 (65.8%) had either one or more risk factors and 13/38 (34.2%) did not have any risk factors. The specific risk factors in Group 2 included: 11/38 from DM, 14/38 from HTN, 3/38 from hyperlipidemias, 5/38 were chronic smokers and 6/38 were alcoholics. Compared to Group 1, Group 2 has higher incidence of DM and HTN (P<0.05). No significant association was found with other risk factors (hyperlipidemia, smoking, and alcohol).

Conclusion: The presence of risk factors - hypertension and diabetes - significantly reduces the response rate to sildenafil.