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**Introduction & Objectives:** Patients with grossly enlarged prostates over 100cc may not be optimal candidates for endoscopic techniques or may have failed such techniques previously. Simple prostatectomy has traditionally been the option for management of these patients. Some of these patients with BPH are also known to harbor prostate cancer. This issue can be a challenge because, in the traditional simple prostatectomy, the posterior lateral zone of the prostate is often left in place, and that is usually the area of the prostate cancers. The dilemma lies between the elimination of the obstructive tissue only or the entire prostate. Our objective is to analyze the outcomes of modified simple prostatectomy (MSP) by the elimination of the entire prostate tissue.

**Materials & Methods:** Thirty-four patients underwent Robotic MSP from September 2010 to April 2019. We evaluated the pre- and postoperative clinical characteristics as well as pathological data. Twenty patients (59%) with a PSA elevation underwent standard prostate biopsy at least once before surgery and were diagnosed as BPH. MSP was performed using the DaVinci robot; the entire prostate was removed with full nerve sparing bilaterally, minimal apical dissection, seminal vesicles sparing, and full vesicourethral anastomosis. The pre- and postoperative AUA scores were compared with a paired T-test.

**Results:** The average follow up was 29 months, mean patient age was 71 years (range 57 to 89 years), preoperative AUA Symptom score was 21 (range 6 to 35). The mean operative time and blood loss were 126 minutes and 160.5 ml, respectively. None of the patients had complications. The pathology report described 17 (50%) with prostate adenocarcinoma. Thirteen patients (38.2%) had Gleason 6 and four patients (11.7%) Gleason 7, being two patients 4+3. Pathologically, 5 (14%) had pT2a, 3 (8%) pT2b and 9(24%) had pT2c. None of them presented with extraprostatic extension or lymphovascular invasion. The mean prostate size reported was 145.6 grams (range 100-264 grams). Twenty-nine patients from thirty that followed in our clinic (96%) had an AUA score improvement with symptom relief. The mean improvement in the AUA score after surgery was 13 points. Eighty percent of the patients who followed in our clinic (24) presented full continence after surgery. The mean days to continence were 68.5 days (range 4-224 days). Regarding the patients with a prostate cancer diagnosis, 100% who follow up in our clinic presented PSA lower than 0.01 in at least six months follow-up.

**Conclusions:** Modified simple prostatectomy is an acceptable treatment option for men with BPH, large prostates over 100 cc, and significant obstructive symptoms. The procedure allows for significant symptom relief and removal of chronic catheters. Our modified approach was able to eliminate the entire prostate, which was significant because 50% of these patients had prostate cancer on the final pathology.