Hypothesis / aims of study
Pudendal nerve somatosensory evoked potential (SSEP) has been studied in voiding and erectile dysfunctions. We aimed to evaluate correlation with pudendal nerve SSEP and functional outcome in patients undergoing radical prostatectomy.

Study design, materials and methods
We retrospectively analyzed data from 31 patients who underwent radical prostatectomy from January 2014 and June 2015, with at least 1 year of follow-up. Patients were divided into 2 groups depending on the presence/absence of incontinence and erectile dysfunction, respectively. Patient demographic characteristics, preoperative evaluations, postoperative outcomes and pudendal nerve SSEP were assessed. Erectile function recovery was defined as question 2 and 3 on the International Index of Erectile Function (IIEF)-5 and continence was defined as using no pads.

Results
Patients with/without postoperative incontinence were 18 and 13, respectively. Demographic characteristics and perioperative outcome were similar between 2 groups. Patients with/without postoperative erectile dysfunction were 23 and 8, respectively. Demographic characteristics and perioperative outcomes were similar according to presence/absence of erectile dysfunction. Patients with erectile dysfunction were a significant increase in latency of pudendal nerve SSEP (19.4 vs 17.2 ms, p=0.016). Patients with postoperative incontinence (PPI) were a significant increase in latency of pudendal nerve SSEP (19.6 vs 17.7 ms, p=0.023).

Concluding message
Our results suggest that pudendal nerve SSEP can be an effective tool in the evaluation of patients with PPI and erectile dysfunction. The test can be used to provide more definitive assessment of functional dysfunction.

Disclosures
Funding: none Clinical Trial: Yes Public Registry: No RCT: No Subjects: HUMAN Ethics Committee: Dongguk University College of Medicine institutional review board Helsinki: Yes Informed Consent: Yes