

PUDENDAL NERVE SOMATOSENSORY EVOKED POTENTIALS IN PATIENTS WITH POSTPROSTATECTOMY INCONTINENCE AND ERECTILE DYSFUNCTION

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