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Comparing association of preoperative transrectal ultrasound prostate weight with prostate weight obtained after radical prostatectomy after adjustment for other prognostic factors in a subset of the Northwestern University Prostate SPORE database. IRENE HELENOWSKI, BORKO JOVANOVIC, MICHAEL GURLEY, ROBIN LEIKIN, WILLIAM CATALONA, ARDEN ROSTON, Northwestern University, TIMOTHY KUZEL, Rush University — Transrectal ultrasound (TRUS) is a non-invasive approach to measure prostate size as a surrogate (density=1.0) for prostate weight with implications in prostate cancer prognosis. But the question is how reliable is this preoperative measurement compared to other measures of prostate weight. This work presents the correlations between preoperative TRUS prostate weight and prostate weight obtained after radical prostatectomy in 434 patients with mean TRUS weight 36g (range: 10g-120g) and the mean prostate weight obtained after radical prostatectomy 51g (range: 16g-180g) from the Northwestern University Prostate SPORE database. 311 patients with weight obtained by digital rectal exam (DRE) were also compared to the TRUS prostate weights with mean and range of DRE weights 33g (10g – 78g). Correlations were adjusted by age, BMI, an indicator variable for a pathological stage of III or greater, and for Gleason score greater than 7. Correlations were also computed for separately for European American and Other Race populations. Differences in means were evaluated via the paired t-test. Results indicate TRUS measures obtained via ultrasound as promising but improvement in the technology still appears needed.

Irene Helenowski
Northwestern University

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