Optimization of Prostatic Biopsy: A Prospective Randomized Trial Comparing the Sextant Biopsy with a 10-Core Biopsy

Objective: New prostatic biopsy protocols suggest to increase the core numbers to enhance detection. Additional cores are usually sampled from the lateral part of the p-zone. We direct the sextant biopsy to the most lateral part of the p-zone, therefore we investigated if there is a gain by adding 4 median biopsy cores. Material and Methods: The prospective randomized trial (n = 200) compared our modified sextant biopsy to a 10-core strategy with 2 additional median cores on both sides. Directed biopsies to suspicious areas were allowed in both groups. Morbidity was assessed by a self-administered questionnaire. Results: PC detection was 32% for 6 cores and 40% for 10 cores. Four patients were detected only by median biopsies. Using the binomial distribution table the gain of 4% is statistically significant. There was no statistical difference in morbidity, but a trend towards a higher rate of side effects in the 10-core group. Conclusions: The gain in prostate cancer detection rate by additional median biopsies is low, but statistically significant. There is no difference in morbidity and patient acceptance is high, therefore we favor the 10-core biopsy in our patients.

Stichworte: Prostatic biopsy; Prostate cancer detection rate; Prostate cancer;