Prostate cancer: novel aspects of diagnostics and surgical technology

Thomas R. W. Herrmann · Axel S. Merseburger ·
Martin Burchardt

Received: 15 October 2010 / Accepted: 18 October 2010 / Published online: 26 October 2010
© Springer-Verlag 2010

“The journey is the reward” (Steve Jobs). Approaching the end of the first decade of a new century, treatment of prostate cancer has significantly changed in its way of diagnosis and surgical treatment.

This special issue of the World Journal of Urology allowed us to accurately compile a comprehensive series of articles on prostate cancer focusing on novel diagnostic approaches and innovations in surgical technology for this malignant disease.

Novel genes such as PCA3 are being assessed for usage as an improved and more consistent marker for prostate cancer. Morote and co-workers have compared expression values from post-prostate massage urine from patients with benign prostatic hyperplasia, high-grade PIN patients and prostate cancer patients demonstrating a high specificity for cancer, but not for the detection of PIN. Therefore, the test might probably not be valuable for monitoring or for active surveillance in high-grade PIN.

Kuppusamy and colleagues demonstrated the optimal injection of local anesthesia for optimal pain control when performing prostate biopsies. Here, the use of local pain control should be globally standardized to ease otherwise painful procedures of prostate cancer diagnostics. Laparo-endoscopic single site (LESS) surgery for the pelvis has arrived where Rabenalt et al. reported on their initial results

on a LESS extraperitoneal radical prostatectomy. However, multi-instrument port and purpose-built instruments were mandatory to perform the procedure safely. Regarding nerve-sparing radical prostatectomy, a vital question arises on whether intraoperative frozen sections should be performed, and to which extent. Heinrich and colleagues added important data to this question by presenting the results of a large cohort of men undergoing nerve-sparing radical prostatectomy with and without frozen sections. Conclusions stated that if there were clinical doubts regarding the time consumed and possible nerve sacrificing, then this step could be omitted. Moreover, an obligation to discuss the extent of the lymphadenectomy was crucial, since the results of the study of Schilling et al. demonstrated more than half of the tumor-positive nodes outside the obturator fossa field.

Currently, organ-sparing treatments for prostate cancer are emerging as possible viable options for low-risk patients. Therefore, to achieve this goal, high-quality imaging is indispensable. Lindner and colleagues have contributed a catching review on the imaging modalities as they relate to focal therapy of prostate cancer. Furthermore, Chung and co-workers presented a retrospective study which shed lights on the debate on diagnostic value and safety of endorectal coil MRI versus phased-array coil MRI for the assessment of local clinical confined prostate cancer.

T. R. W. Herrmann (✉) · A. S. Merseburger
Department of Urology and Urooncology,
Medical School of Hannover (MHH),
Carl Neuberg Str. 1, 30625 Hannover, Germany
e-mail: herrmann.thomas@mh-hannover.de

M. Burchardt
Department of Urology, Ernst Moritz Arndt
University of Greifswald, Fleischmannstr. 42 - 44,
17475 Greifswald, Germany

Conflict of interest None.