

New trends in urology

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Abstract

Urology is a unique specialisation because urologists use a lot of technology: endoscopes, lasers, laparoscopy, medical robots, and multiple different devices for stone disintegration and tissue excision (piezoelectric, pneumatic, electrohydraulic, lasers). Urology also deals with big oncological resections, reconstructive surgery, and artificial device implantation. Urology is changing, like whole medicine. Modern urology is less invasive due to the usage of smaller, flexible endoscopes, and robot-assisted procedures. The future of these domains is the development of AI in diagnostics, outcome prediction, treatment planning and surgical skills evaluation. New technologies (printing of organs with stem cells, virtual reality, wearable devices, home self-testing, big data analysis and data sharing, portable devices for self-management) will change urology in even higher proportion than other disciplines. However, the most important factors responsible for the development of urology are well- educated urologists, inventive engineers, cooperative IT specialists and foreseeing administrators.

About the lecturer

Michał Wróbel, MD, PhD is a urologist, Fellow of the European Board on Urology, Deputy Head of the Urology and Oncological Urology Ward in the Lower Silesian Specialist Hospital, member of the Polish Urological Association and the European Association of Urology, Chief of the Lower Silesian Division of Polish Urological Association, and member of the Main Board of Polish Urological Association. He is an organiser of periodical conferences *Urosilesiana* and *Polish-Ukrainian Urological Symposium*. The main areas of his scientific interest are urinary stones, urological oncology and reconstructive surgery.