

52. PECULIAR FEATURES AND FUNCTIONALITY OF SIMULATORS USED FOR DIAGNOSTICS AND TREATMENT OF GENITOURINARY SYSTEM DISEASES

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Introduction. The current level of simulation technologies development makes it possible to implement a qualitatively new type of practical training for urologists based on innovative and promising methods.

Aim of study. In order to study the effectiveness of innovative technologies data, a review of publications and abstracts presented at the annual conferences of the American and European Associations of Urology, the Russian Society of Urology in the field of study, comparison and description of simulators used to diagnose and treat diseases of the genitourinary system, was carried out.

Methods and materials. To conduct the study, materials that describe various virtual simulators with high realism were used. They include, for example, the UroSim simulator, which allows to practice endosurgery skills in urology; simulator URO / PERC Mentor for developing skills in performing surgical interventions for urolithiasis, etc.

Results. According to numerous studies, simulation devices are a safe method to improve the technical skills of trainees at an early stage. However, the current generation of simulators also causes some questions. There is no data, for example, to determine which exercises lead to the improvement of technical skills used in real surgery. Further development of exercises for performing complex maneuvers and preventing the development of complications remain relevant issues nowadays. Performing tasks in the form of clinical situations using the UroSim simulator allows, in conditions close to real, to gain experience in various endourological and minimally invasive procedures, to master the skills of transurethral resection of the prostate gland, bladder, practicing interventions on the prostate gland using a laser, etc. No less effective is the URO / PERC Mentor simulator for developing skills in performing surgical interventions for urolithiasis. The simulator provides a single platform for endourological and percutaneous procedures. The assessment based on the results of the exercises includes such indicators as time and economy of movements, safety parameters of dissection and coagulation, errors and complications.

Conclusion. Currently, devices for simulation training in the field of urology have proven their effectiveness and relevance, and the safety of simulation training is universally recognized.