Simulator can teach basic robotic-assisted surgery

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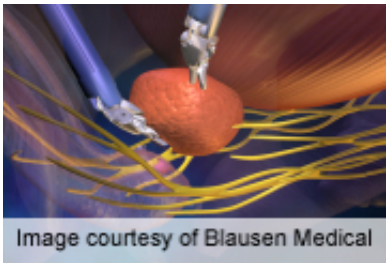
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(HealthDay)—About half of medical students with no experience with robotic-assisted laparoscopic surgery can learn basic skills within two sessions using a simulator, according to a study published in the March issue of *Urology*.

Willem M. Brinkman, M.D., from Catharina Hospital Eindhoven in the Netherlands, and colleagues assessed the learning curve of 17 medical students with no experience with robotic-assisted surgery on the da Vinci simulator. Each student completed two simulator sessions within three days; the sessions consisted of a warming-up exercise and five repetitions of the "ring and rail II" task.

Of nine learning parameters, the researchers observed significant

learning on five parameters within one to 10 repetitions: overall score, time to complete, instrument collision, instruments out of view, and critical errors. There was improvement in economy of motion and excessive instrument force only within the first five repetitions, and no improvement in drops and master workspace range. Nine of the students were able to meet the overall performance score of three experts (90 percent).

"Most parameters showed that basic robotic skills are learned relatively quickly using the da Vinci skills simulator, but that 10 repetitions were not sufficient for most novices to reach an expert level," Brinkman and colleagues conclude.

More information: Abstract
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