

Mayo Clinic News Network

Title: Mayo Clinic Minute: Robotics refine knee replacementDate: July 28, 2017

Intro: America's aging population has created a steadily increasing demand for knee replacement surgeries. Osteoarthritis is the most common reason knee joints wear out. It's a condition that becomes more prevalent with age. However, Dr. Cedric Ortiguera, a Mayo Clinic orthopedic surgeon, says the precision of robotic assistance in surgery is expanding the patient population that can be helped.

"Due to the durability of implants, knee replacement surgery typically is reserved for patients over 60," Dr. Ortiguera says. "But, as technology has improved, we can make the implants last perhaps the lifetime of a patient, so, more patients in their 40s and 50s can have a total knee replacement... and maintain a good, active quality of life rather than waiting." Dennis Douda reports.

Video	Audio
Total running time [0:59]	/// VIDEO
TITLE: Cedric Ortiguera, MD	"Maybe a decade ago we were doing
Orthopedic Surgery	250,000 knee replacements in the United
Mayo Clinic	States per year. Now we're up to about
	800,000 or 900,000 per year."
Dr. Ortiguera speaking	Mayo Clinic orthopedic surgeon Dr. Cedric
	Ortiguera says there could be 3 million per
	year by 2030, and to expect robot-arm-
	assisted knee replacements to help serve that
	need, because of several advantages.
Dr. Ortiguera speaking	"There's potentially less blood loss, less
	invasive surgery to get into the knee and
	perhaps a quicker recovery. But, overall,
	we feel the best benefit will be the
	improvement in the alignment and the
	overall precision of the surgery."
Dennis Douda speaking	In this demonstration, Dr. Ortiguera says you
	can see the surgeon still controls the
	procedure, perhaps with even more control.
Dr. Ortiguera speaking	"It actually keeps our hand and the device
	and, the saw we use, in a much safer area.
	And it prevents us from going outside
	those boundaries."
Dennis Douda speaking	Finally, he says, more precise placement may
	allow the devices to last longer, meaning
	patients could get needed knee replacements
	younger without fear of wearing out their
	implants. For the Mayo Clinic News
	Network, I'm Dennis Douda.

Anchor tag: Dr. Ortiguera says following robotic-arm-assisted surgery, patients usually stay in the hospital for one to two days, then use a walker or crutches for about a week, and rely on a cane for another three to four weeks of recuperation.