

THYROID

Robotic surgery shows promise for the treatment of PTMC

A research team from South Korea has demonstrated that robotic thyroid surgery is superior to conventional endoscopic surgery in patients with papillary thyroid microcarcinoma (PTMC).

Open thyroidectomy is the standard treatment for patients with PTMC. However, this surgery leaves a noticeable scar in a highly visible area. As scarring can have a negative effect on a patient's quality of life many attempts have been made to devise an alternative approach that reduces scarring. Complete thyroidectomy is easier to achieve with robotic surgery than with endoscopic surgery as robotic surgery enables "a strong, constant grip of the gland that reduces unnecessary manipulation of the thyroid and the possibility of cancer seeding during the operation," explains one of the study researchers, Woong Youn Chung (Yonsei University College of Medicine).

Of the 1,150 patients with PTMC included in the study, 570 underwent endoscopic thyroidectomy and 580 underwent robotic surgery. The researchers compared the characteristics, early surgical outcomes and surgical completeness of the two groups.

Although transient hypocalcemia was more frequent in patients who underwent robotic surgery than in those who received endoscopic surgery, the incidences of other adverse events were similar. In addition, robotic thyroidectomy enabled the surgeons to carry out safer, more precise and extensive surgery than could be achieved with conventional endoscopy. "This means that given the same incision length, the use of a robot widens the surgical extent and allows operations that are more radical to be performed," comments Chung.

As robotic thyroidectomy is a fairly new technique, its long-term effects cannot be



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assessed. However, its short-term follow-up results are similar to those of endoscopic surgery and robotic surgery seems to offer a range of other benefits, including an improved field of vision.

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