



# Three-Port Transoral Robotic Thyroidectomy in Papillary Thyroid Carcinoma

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## ABSTRACT

**Background.** Although transoral thyroidectomy has become popular in thyroid surgery, transoral robotic thyroidectomy (TORT) has only been successfully applied in a very small number of medical centers worldwide.<sup>[1,2,3,4,5]</sup> In this video, we show a three-port TORT without an axillary incision for papillary thyroid carcinoma.

**Patient and methods.** A 35-year-old female with cT1aN0M0 papillary thyroid carcinoma had a strong motivation to proceed with surgery but avoid external neck incisions. Thus, we decided to perform a hemithyroidectomy with isthmusectomy using a transoral robotic approach, employing the da Vinci Xi surgical system.

**Results.** The operation was completed successfully without conversion to open surgery. The working space creation time, docking time, and console time were 30 min, 40 min, and 130 min, respectively. The pathological results were papillary thyroid carcinoma with 6- and 5-mm tumors. The patient was discharged 4 days after surgery without any complications such as bleeding, infection, mental nerve damage, permanent hoarseness, or hypoparathyroidism. The patient was completely satisfied with the cosmetic result.

**Conclusion.** Three-port TORT without an axillary incision is a promising approach with optimal cosmetic outcomes. For Vietnam, a developing country, success in the application of TORT using the new da Vinci Xi robotic platform for thyroid cancer is an important milestone in the development of thyroid surgery.

**Keywords** Transoral robotic thyroidectomy · TORT · Robotic thyroidectomy · Transoral approach · Transoral thyroidectomy

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## DISCLOSURES

Duy Quoc Ngo, Binh Van Pham, Duong The Le, Toan Duc Tran, Quy Xuan Ngo, and Quang Van Le have no conflicts of interest or financial ties to disclose.

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