

### Technical Particularities of the Robot-Assisted Trans-Axillary Thyroidectomy

D.D. Axente<sup>1,2\*</sup>, Z.Z. Major<sup>2,3\*</sup>, C.M. Micu<sup>1,2</sup>, N.A. Constantea<sup>1,2</sup>

<sup>1</sup>V<sup>th</sup> Surgical Clinic, Municipal Clinical Hospital, Cluj-Napoca, Romania

<sup>2</sup>University of Medicine and Pharmacy "Iuliu Hațieganu", Cluj-Napoca, Romania

<sup>3</sup>Neurology Department, Municipal Clinical Hospital, Cluj-Napoca, Romania

#### Abstract

Numerous minimally invasive techniques for thyroid surgery have been described in recent years. Technical disadvantages have led to low practicability, although these techniques proved to be safe and to deliver good results. The robotic system was developed to overcome the limits of endoscopic surgery. Recently, based on the advantages of this new technology, robot assisted endoscopic surgery was introduced for minimally invasive thyroid surgery as well. Our experience with robot-assisted transaxillary thyroid surgery begins in November 2010 when we have practiced our first unilateral total lobectomy. From November 2010 to March 2012, 50 patients underwent robot-assisted endoscopic thyroid surgery using the transaxillary approach. The aim of this study is to present the technical details and particularities of this procedure, based on our experience.

**Key words:** robot-assisted, minimally invasive, thyroid surgery, transaxillary approach

Corresponding author: Major Zoltán Zsigmond

University of Medicine and Pharmacy "Iuliu Hatieganu", Romania

Pasteur 6, 400349 Cluj-Napoca, Romania

Tel/fax: +40-264-595629

E-mail: [zoltan.major@umfluj.ro](mailto:zoltan.major@umfluj.ro)

\*- pointed authors had equal contribution