



P-022

IMPLEMENTATION OF A NEW ROBOTIC SURGICAL SYSTEM FOR GENERAL THORACIC SURGERY, EARLY EXPERIENCE

Mario Nosotti^{1,2}, Margherita Cattaneo¹, Alessandro Palleschi¹, Francesco Damarco¹, Valeria Musso¹, Cristina Diotti¹, Lorenzo Rosso^{1,2}

¹Foundation IRCCS Cà Granda Ospedale Maggiore Policlinico, Milan, Italy

²University of Milan, Milan, Italy

OBJECTIVES

The Versius Surgical System (CMR Surgical, Cambridge, UK) is a commercially available European robotic platform that represent an alternative to the well-structured US robotic system. The aim of this study is to describe the clinical implementation of the Versius in a tertiary university hospital following the IDEAL development framework for surgical innovation.

METHODS

The study was conducted following the IDEAL Stage 2a (“Development”) protocol. Patients with thoracic disease requiring surgical procedure were prospectively included. Patient were informed that the procedure could be a hybrid surgery (robotic-thoracoscopic). Main outcome measures included success rate, complication rates and pathological results.

RESULTS

From October 2021 to January 2022, eighteen patients underwent thoracic surgery with Versius System; the procedures were: 9 typical pulmonary resections, 5 mediastinal procedures (thymectomy, node biopsy, neuroma resection), 2 wedge resections, 2 pleurodesis. The mean age was 55 years. Estimated blood loss was 100-150 mL. The average operative time was 236 minutes (106-415 min). All procedures were completed according to pre-operative strategy except one which required open surgery conversion to fix a small bronchial lesion. In one case occurred a console failure; therefore, the procedure was completed by VATS without any surgical trouble. Globally the success rate was 88,2%. Two patients experienced Grade II morbidities (11,8%). The average length of stay was 5 days (2-8 days). All the 12 oncological procedures were R0. A statistical monitoring techniques (CUSUM) were performed.

CONCLUSIONS

Our technical-feasibility-study on Versius Surgical System suggests that this innovative European robotic platform is a successful and safe device for thoracic surgery. The versatility and the small footprint allowed us to have our original setting, personal surgical approaches and good integration with the table assistant. Thoracic procedure carried out with the European robotic platform could be considered stable enough to allow multicenter replication following IDEAL Stage 2b (“Exploration”) protocol.

Disclosure: No significant relationships.

Keywords: Robotic-Assisted-Thoracic-Surgery (RATS).



30th ESTS MEETING

19 - 21 JUNE 2022 • THE HAGUE, THE NETHERLANDS



ABSTRACTS

