



Minimally invasive surgery in Brazil

As the patient population ages, the necessity for minimally invasive procedures increases worldwide. Over the past 2 decades, general thoracic surgery has been revolutionized by rapid development and assimilation of minimally invasive techniques for lung cancer surgery. Though video-assisted thoracoscopic surgery (VATS) and robot-assisted thoracoscopic surgery (RATS) are now established as feasible options to lung cancer surgery, most lung resections continue to be performed via a thoracotomy. When compared to lobectomy via thoracotomy, VATS has improved short-term outcomes: as post-operative complications, shorter hospitalization, shorter duration of chest tube, and at least similar rates of postoperative mortality. Therefore, minimally invasive techniques are proven safe and less morbid alternative to open resection, however, skepticism remains about its oncologic effectiveness.

In developing countries, hospital acquiring and insurance coverage policies have been barriers to the early adoption of innovative minimally invasive technology including VATS and RATS lobectomy. Thoracoscopic surgical procedures are continuously evolving in terms of: surgeons acceptance, indications and development of training centers. From the perspective of a conventional surgeon, incorporation of minimally invasive techniques is both challenging and rewarding.

Brazil, as an emerging country, faces several issues related to the implementation of minimally invasive thoracic surgery. In addition to the logistical barriers already mentioned, education, disease mix, and the healthcare system interfere significantly in the process of adopting innovation. Despite that, many thoracic surgeons from all regions of the country overcame these challenges and started their minimally invasive programs. This special issue on Minimally Invasive Thoracic Surgery - Robotics and VATS in Brazil was produced to provide an update on the modern general thoracic surgery practiced in Brazil. These articles reflect the local reality and were written by surgeons with large experience in minimally invasive thoracic surgery.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Journal of Visualized Surgery* for the series "Minimally Invasive Surgery - Robotics and VATS in Brazil". The article did not undergo external peer review.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/jovs.2019.03.03>). The series "Minimally Invasive Surgery - Robotics and VATS in Brazil" was commissioned by the editorial office without any funding or sponsorship. Both authors served as the unpaid Guest Editors of the series. The authors have no other conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Paula A. Ugalde



Ricardo Terra

Paula A. Ugalde

*Clinical Professor, Thoracic Oncology Program Director,
Institut de Cardiologie et de Pneumologie de Quebec, Laval University,
Quebec, Canada. (Email: paula.ugalde@criucpq.ulaval.ca)*

Ricardo Terra

*Division of Thoracic Surgery, Hospital das Clinicas,
University of Sao Paulo Medical School, Sao Paulo, Brazil.
(Email: rmterra@uol.com.br)*

Received: 18 February 2019; Accepted: 28 February 2019; Published: 12 March 2019.
doi: 10.21037/jovs.2019.03.03

View this article at: <http://dx.doi.org/10.21037/jovs.2019.03.03>

doi: 10.21037/jovs.2019.03.03

Cite this article as: Ugalde PA, Terra R. Minimally invasive surgery in Brazil. *J Vis Surg* 2019;5:24.