Crosstalk between the thoracic physician and the surgeon: perspectives on pulmonary infections, malignancy and chest surgery

This special edition entitled “Crosstalk between the thoracic physician and the surgeon: perspectives on pulmonary infections, malignancy and chest surgery” is about unifying interaction, collaboration, concepts and ideas at several levels. With the burgeoning increase in pulmonary infections and wider accessibility to cardiothoracic services in developing countries, we thought it appropriate to facilitate greater interaction between the thoracic physician and surgeon in different settings. Furthermore, at a different level given that diseases like tuberculosis (TB) and COPD remain major problems in much of the developing world, further understanding about the surgical aspects of these diseases are warranted.

The first group of papers is dedicated to TB, which remains a public health emergency globally, and is responsible for almost 1.5 million deaths annually. Whilst the disease is treatable with a 6-month course of antibiotics, the extensive lung remodelling and immune-pathology related to the disease results in chronic pulmonary disability, fibrosis, and architectural distortion resulting in broncho-stenosis, bronchiectasis and pleural thickening. Given that globally there are almost nine million prevalent cases of TB annually, it is still a common condition seen in developing countries. It is therefore appropriate that Halezeroğlu and Okur review thoracic surgery for haemoptysis in the context of TB and discuss several management approaches. A new face of the global TB epidemic is that of drug-resistant TB. MDR-TB has now been superseded by XDR-TB and TDR-TB (totally drug-resistant TB, and including XXDR-TB and super XDR-TB). We have now come a full circle, and once again after almost five decades, we are seeing large numbers of therapeutically destitute TB cases due to high grade resistance. In Cape Town, South Africa, we are seeing large numbers of therapeutically destitute cases in clinical practice, many of whom are now being discharged back into the community. In the few patients who are fit and appropriate for surgery, this treatment modality offers the only hope of successful outcome. The papers by Calligaro and colleagues, and Dewan & Moodley, are therefore timely. A condition often seen as a consequence of TB, though it’s seen in several other chronic respiratory diseases is that of pulmonary aspergilloma. This remains a major challenge in developing countries and the surgical approach to such patients is discussed in detail by Moodley and colleagues.

By contrast, in much of the developed world, non-tuberculous mycobacterial infections remain an important clinical problem, particularly in elderly patients. The relevant indications, challenges and controversies are discussed in the paper by Johnson and Odell. Thus, non-mycobacterial lower respiratory tract infections remain a problem in both resource rich and poor settings. COPD is a burgeoning epidemic in many resource poor settings driven by smoking, TB, HIV, pollution, and biomass fuel exposure, amongst other factors. COPD remains within the WHO top 10 list of global killers, and COPD incidence is set to increase by 2030. It is therefore appropriate and timely to include a paper on treatment of COPD exacerbations.

Like TB, COPD and pneumonia, malignancy is a burgeoning problem in resource poor settings mirroring the increased incidence of smoking. Terán and Brock discuss N2-specific management aspects of lung cancer, Murrmann and colleagues discuss the approach to a solitary pulmonary nodule in different settings, and Grimm and colleagues discuss surgical aspects of oesophageal malignancies.

The paper by Murrmann and colleagues resonates well with this thematic edition, which seeks to bring together thoracic physicians and surgeons, from both resource rich and poor settings, and discuss medical and surgical approaches within specific contexts. Indeed, infections like pulmonary TB have to be taken into account when faced with a patient with a solitary pulmonary nodule in resource poor settings. Finally, Bacon and colleagues and Mueller and coworkers review challenging problems in clinical practice: interventional options for non-resectable tracheal stenosis, and management of air leaks and residual spaces post lung resection, respectively.

We are extremely grateful to all the contributors for their comprehensive and insightful papers, which we hope will foster and facilitate important interaction between thoracic physician and surgeons, and highlight problems faced by both in resource poor and rich settings. We are also extremely grateful to Prof. Nanshan Zhong, Grace S. Li and Melanie C. He from the Journal of Thoracic Disease for their kind assistance and support throughout the preparation of this special edition. It was pleasure to work with them. We are also grateful to our families for their support and understanding during the many long hours it took to prepare this special edition.

Keertan Dheda, Loven Moodley
Division of Pulmonology and Department of Cardio-Thoracic Surgery, University of Cape Town & Groote Schuur Hospital, Cape Town, South Africa


Disclosure: The authors declare no conflict of interest.