

General Thoracic Surgery underwent a long way. 30 to 50 years ago it was a type of surgery with frequent and severe complications. It evolved to standardized procedures with a very low mortality of 0-1% in anatomical lung resections in high volume centers and low morbidity. These results were achieved by a collaborative effort of a large number of medical specialties, including surgeons, anesthesiologists and respiratory physiotherapy, oncologists pulmonologists and pathologists, etc.

Preoperative planning with modern imaging techniques and exact staging of the malignant disease allow accurate planning of the interventions. With minimally invasive surgery even complex interventions can be performed with very small access, consequently with very limited postoperative pain, improved mobilization of the patient, improved postoperative respiratory function and better physiotherapy.

The current volume on *Peri-operative Risk Factor and Therapeutic Strategy in Lung Cancer Surgery* pursues exactly this approach and summarizes many aspects: prognostic risk factors based on patient condition, cardiac or lung disease or body mass index, nutritional status or patient's fitness and performance status are discussed in the first chapters.

The excellent results in thoracic surgery today, are possible as mentioned, with an integrated approach and close collaboration of all medical specialties involved, which ideally are organized in a lung cancer center with yearly audit. This form of organization results in a well structured and documented treatment process (e.g., ERAS) and subsequently allows to draw conclusions, analyze complications with further improvement and constant teaching of the entire team.

The current publication also focuses on intra- and perioperative patient management. State of the art surgical techniques allow even complex procedures to be performed with minimally invasive techniques and help to stratify the risk of compromised patients, with a number of comorbidities, in order that these patients may also benefit from a curative surgical approach. Risk stratification means also to evaluate alternatives to surgery and it is important for surgeons to keep these rapidly developing techniques in mind. These aspects are discussed in the chapter: *Surgery or SBRT?*

In summary, I am convinced, that in future the analysis of individual risk factors by artificial intelligence will be a powerful tool for decision making in Thoracic Surgery. In our division we started years ago to summarize each patients risk in a 'risk profile' and are currently evaluating prospectively if complications or for example prolonged hospitalization can be predicted. Alternatives to surgery for the treatment of lung cancer are a reality and state of the art oncological treatments are constantly improving. This challenge has to result in further improvement of the outcome of surgical treatment options and the current publication summarizes the experience and state of the art treatment of a large group of Thoracic Surgeons from all over the world and gives an excellent insight in the rapid developments in the field.



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