

ESTS Travel Fellowship Report

I visited the department of thoracic surgery at Ruhrlandklinik, Essen, Germany from December 7th to 11th 2009 as thoracic surgery trainee, supported by ESTS Travel Fellowship Programme. In this report, I would like to share my experience made in this short, but well-organized and informative fellowship with other colleagues.

The department of thoracic surgery at the Ruhrlandklinik, headed by Professor Stamatis, is one of the most renowned, high-volume thoracic surgery centers in Germany and Europe. With its comprehensive range of thoracic surgical techniques and over 2,300 thoracic procedures a year (including over 750 major lung resections), it offers a perfect opportunity to gain a good overview in the field of thoracic surgery.

On Monday morning, I was warmly welcomed and shown around in the hospital by Professor Stamatis. After visiting the out-patient unit, I was brought to the operating theatre. I observed mediastinoscopies, lobectomies and wedge resections in different operating rooms. I could ask any question through out the surgery and had the feeling that the surgeons made the effort to give me the best answers. I also saw the technique of anterior lateral muscle sparing thoracotomy as the standard approach in Ruhrlandklinik for lung resection, which is however not common in my institution.

From Tuesday on, I was involved in Professor Stamatis' operating list as first assistant. In the first case, he performed a video-assisted wedge resection in a female patient with solitary pulmonary nodule in the right segment 6. The nodule was located centrally and could not be detected via thoracoscopy initially. He found it rapidly by means of retracting the lung tissue and digital palpation. The pathological examination of the intraoperative frozen section confirmed a benign lesion. Subsequently, tumor extirpation via complete median sternotomy was performed in a female patient with retrosternal tumor and infiltration of the superior vena cava. In the afternoon, I attended the so called "Indication conference" and "Tumor conference", in which the diagnosis and treatment for complex cases of lung diseases and lung cancers were discussed in a multidisciplinary manner.

On Wednesday, I was fortunate to assist in a partial tracheal resection in a patient with subglottic tracheal stenosis secondary to emergency cricothyroidostomy in his childhood.

The dissection and anastomotic technique in tracheal surgery were well demonstrated. As the second procedure, Professor Stamatis performed a video-assisted wedge resection in a woman with a solitary pulmonary nodule located in the left upper lobe. Due to malignant finding in the intraoperative frozen section, an anatomical bi-segmentectomy was performed. Thereafter, I visited the patient with partial tracheal resection in the ICU and discussed routine postoperative care for these patients with the attending physician.

On the next day, I observed for the first time a minimally invasive funnel chest repair (Nuss procedure). After assisting in a video-assisted wedge lung resection, I attended the tumor conference again, which takes place twice a week. Afterwards, I heard a scientific presentation from Dr. Jacob, one of the senior surgeons, who shared his experience on the application of Vivostat®, a novel autologous fibrin sealant, in thoracic surgery. Along with several visiting surgeons from Spain, I enjoyed this very interesting and educative presentation.

On the last day, I had the opportunity to assist Dr. Krebk in a complex surgery in a patient with left-sided pancoast tumor without vessel or nerve involvement. In supine position, an anterior incision was initially made on the level of the second intercostal space. The first and second ribs at the costosternal junction, the anterior and middle scalene muscle as well as intercostal space were divided, while the subclavian vessels and brachial plexus as well as phrenic nerve were well preserved. Subsequently, the patient was placed in a right lateral decubitus position. A standard posterolateral thoracotomy was performed. The resection of the first and second ribs was completed, followed by upper lobe resection. By assisting in this surgery, I got my first experience in combined anterior and posterior approaches and discovered the advantages for preservation of the vessels and nerves.

It was a worthwhile fellowship indeed. I have gained a lot of knowledge and experience in thoracic surgery in a short time. I'm very grateful that ESTS provided me this unique opportunity. I hope that more thoracic surgeons, especially trainees can also get this chance. I greatly appreciate Professor Stamatis and his team for their kind help. It was really a pleasure to work with them. I would not hesitate to recommend this experience to any other colleagues. In the end, I would like also to thank my director Professor Haverich and the senior surgeons Professor Fischer and Dr. Zardo for their kind support.

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