P-276
SUBARACHNOID-PLEURAL FISTULA WITH INTRACRANIAL HYPOTENSION SYNDROME: A RARE COMPLICATION OF EXTENDED LUNG RESECTIONS
Mohamed Zaatar1, M.H. Shuaib1, E Al-Shahrabani1, L. Mikesova1, A. Harati2, M. Albert1
1Thoraxchirurgie, Lungenklinik Hemer, Hemer, Germany; 2Neurochirurgie, Klinikum Dortmund, Dortmund, Germany

Objectives: Lung surgery with chest wall resection is an established procedure for the treatment of non-small cell lung cancer (NSCLC). In paravertebral localization of the tumour an opening of the dura can occur during resection. Subarachnoidal-pleural fistula (SAPF) with development of a subdural hygroma and an intracranial hypotension syndrome (IHS) is a very rare complication after extended lung resections. In literature there are only a few case reports about this complication.

Case description: We report a 62-year-old male patient who underwent a lower lobectomy with chest wall resection due to NSCLC. During resection at the costovertebral joint the dura was opened and a few ml of cerebrospinal fluid (CSF) were lost. This injury was sealed with a fibrin patch (TachoSil®). On the 5th postoperative day the patient developed nausea, vomiting, confusion and headache. He also lost high amounts of pleural effusion. The cranial MRI showed a bilateral subdural hygroma with narrowing of the ventricles with a maximal width of 8 mm. Due to the clinical worsening up to somnolence the patient had to be mechanically ventilated. A high level of beta-trace protein was measured in the effusion. The myelography confirmed a persistent SAPF in the resection area. Due to the decreasing amount of effusion and improved neurology a surgical fistula closure was not necessary. The neurological symptoms disappeared under conservative treatment.

Conclusion: SAPF with subdural hygroma and IHS occurs rarely after extended lung resections. It represents a significant perioperative complication, which entails respiratory and neurological impairment. It has to be considered if a persistently high pleural effusion or signs of cranial hypotension exist. It should not be underestimated, as it can result in tension-pneumocephalus, cerebellar insult, bleeding or meningitis. SAPF can be confirmed by laboratory tests and imaging. The type of treatment depends on clinical picture and amount of pleural effusion.

Disclosure: No significant relationships.