**Posters**

**14. Delivery of care**

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**Kidney transplantation after lung transplantation in cystic fibrosis patients**

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**Objectives:** Long term survival after lung transplantation has significantly improved during the last 10 years. On the other hand, complications have increased. Renal diseases, most probably related to the immunosuppression therapy and cystic fibrosis therapy such as antibiotic therapy, are important complications during the follow-up.

**Methods:** During the period November 1996 up to now 84 lung transplantation recipients with cystic fibrosis (40 males) followed in our center according to a pre-established follow-up protocol for Tx patients. During the follow-up period all patients developed renal complications. The mean time of occurrence after lung transplantation was 12 months. All patients have reduced immunosuppression therapy during the follow-up period (in 10 patient Tacrolimus was changed to Rapamycin). Three patients (2 females) developed severe renal complications after 8, 10, 13 years after lung transplantation, and underwent kidney transplantation. Two pts are alive after 4 and 1 year after renal transplantation with good pulmonary function (FEV1 65% and 85% predicted) normal creatinine serum level and good creatinine clearance. One pt (female) died after 1 year after renal transplantation due to bronchiolitis obliterans syndrome.

**Conclusion:** Renal diseases after lung transplantation are an important complication. A multidisciplinary approach is needed since the beginning of the follow-up, in order to obtain precocious diagnosis and establish an adequate therapy. Kidney transplantation for our opinion is a good opportunity in pts with severe renal complication.

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**Temporal bone pneumatization in adult patients with cystic fibrosis**

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In Cystic Fibrosis the paranasal sinuses are often smaller than in the healthy population. It is assumed that paranasal sinus disease during development inhibits pneumatization of the sinuses, but also the temporal bone. Interestingly, a few studies described an increased pneumatization of the temporal bone in CF patients compared to healthy controls. This seems contradictory and underlying mechanisms remain unclear. Moreover, differences in pneumatization between patients with different CF genotypes have been described. A direct influence of the CFTR mutation on the temporal bone pneumatization (TBP) has been suggested.

**Objectives:** With a prospective study in 104 adult patients with CF we investigated temporal bone pneumatization and a possible correlation with CF genotype.

**Methods:** In 104 adult patients a CT scan of the temporal bone was performed. Patients were divided into 2 groups according to their genotype with mutation class I-III as severe CF and mutation class IV-V as mild CF. TBP was estimated by two assessors using a validated scale. To assess the interobserver agreement a Cohen's kappa was calculated.

**Results:** In total 208 temporal bones from 104 patients were assessed; 31 patients with mild CF and 73 with severe CF. The Cohen's kappa was 0.85, which indicates a substantial agreement between the two assessors. TBP differed significantly between the mild CF and severe CF group ($\chi^2 = 0.002$), with a greater TBP in the severe CF group.

**Conclusion:** Severe CF seems associated with greater TBP. Strikingly, patients with severe CF did not display less pneumatized temporal bones, where they often have less pneumatized paranasal sinuses.