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**Title:** Pulmonary cytomegalovirus infections following renal transplantation

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**Body:** Cytomegalovirus (CMV) infections are the most important causes of mortality among kidney transplant patients. The pulmonary localisation is one of the most common manifestations of these infections. The aim of the study is to determine the risk factors for CMV pneumonia and its clinical outcome in patients after renal transplantation. Thirty kidney recipients with clinical, laboratory and radiological data for infiltrative pulmonary inflammation are included in the recent prospective study. After etiological diagnosis the active CMV infection is established in 10 cases (33.3%). There was no significant correlation between CMV pneumonia and the period of dialysis before transplantation, and/or time of development of pneumonia after surgical procedure. The infection did not depend on the kind of immunosuppressive therapy and the severity of hypoxemia in the time of hospitalization ( $p > 0.05$ ). On the fifth day there were statistical differences in the blood oxygen level between the group with pulmonary CMV-infection and the group with infection due to the other microbiological agents ( $p = 0.028$ ). CMV-pneumonia is with longer hospital stay than other etiology (8.75 days vs. 12.20 days,  $p = 0.049$ ). Pulmonary CMV infection increased the risk of developing of acute respiratory distress syndrome ( $p = 0.002$ ) and fatal outcome. Early diagnosis and active treatment of pulmonary infections caused by Cytomegalovirus reduce the incidence of complications and mortality in the group of patients after kidney transplantation.