Background: *Scedosporium/Lomentospora* spp are fungi that cause severe and life-threatening infections, due to the type of patients involved (haematological or transplants patients) and their resistance to most antifungal drugs. The aim of this study was to describe the epidemiology of respiratory infections due to *Scedosporium/Lomentospora* spp in a university tertiary hospital in Madrid, Spain.

Materials/methods: retrospective study of epidemiological characteristics of upper and lower respiratory infections due to *Scedosporium/Lomentospora* spp in a period of 3.5 years (January 2015-June 2018). A review of medical reports of patients was also performed.

Results: *Scedosporium/Lomentospora* spp was identified in 72 respiratory samples of 18 patients (11 men, 61.11%; average age 58.56 years). 35 isolations (48.61%) were from admitted patients, 27 (37.50%) from hospital outpatients services and 10 (13.89%) from Urgency Service. 65 samples (90.28%) were obtained from noninvasive procedures (44 sputum, 17 bronchoaspiration, 4 tracheal) and 7 (9.72%) from invasive procedures (6 bronchoalveolar lavage, 1 bronquial lavage). 12 strains were identified as *Scedosporium spp*, 11 as *Lomentospora prolificans* and 50 as *Scedosporium apiospermum* complex; in one sample were isolated two different strains (*Lomentospora prolificans* and *Scedosporium apiospermum* complex). 17/18 patients were diagnosed with a respiratory condition (5 bronchiectasis, 4 lung transplants due to cystic fibrosis, 6 lung transplants due to other respiratory conditions, 2 others) and 1 patient with a haematological condition (acute myeloid leukemia). In 13/18 patients (72.2%) the isolation was considered as colonization, in 3 patients (16.7%) as a fungal invasive disease (IFD) and in 2 patients (11.1%) as IFD after a colonization of several months (in 1 patient the fungi was isolated along with *Aspergillus terreus* and *Nocardia* sp).

Conclusions: the main specie isolated was *Scedosporium apiospermum* complex (68.50%). The isolation of *Scedosporium/Lomentospora* spp was characteristic of patients with a pulmonary condition (particularly in those with a lung transplant due to cystic fibrosis or other causes) and only one patient was diagnosed with a haematological condition; in most patients (13/18) the fungi was considered as a colonization.