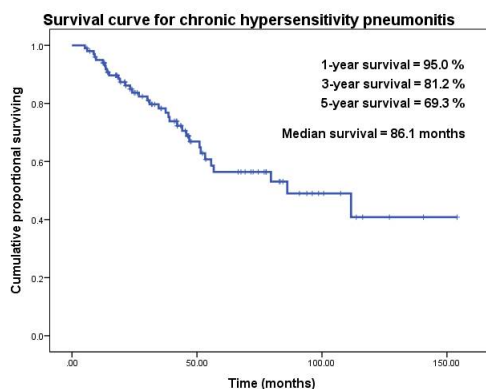


## Prognostic factors in patients with chronic hypersensitivity pneumonitis

<sup>1</sup>울산대학교 의과대학 서울아산병원 내과, <sup>2</sup>울산대학교 의과대학 서울아산병원 호흡기내과

\*김연주<sup>1</sup>, 송진우<sup>2</sup>

**Background/Aims:** Chronic hypersensitivity pneumonitis (cHP) is characterized by various clinical course and outcome, but prognosis and prognostic factors are not well defined. The aim of this study was to identify clinical outcome and prognostic factors in patients with cHP. **Methods:** This was a retrospective review of 101 patients with cHP (all biopsy proven). **Results:** The median follow-up period was 24.8 months. Mean age was 60.4 years, 60.4% were female and 33.7 % died during follow-up. The 1, 3, and 5-year survival rates were 95 %, 81.2% and 69.3 %, respectively. Non-survivors had older age and lower body mass index (BMI), and showed higher forced expiratory volume in 1 second / forced vital capacity ratio (FEV1/FVC), lower diffusing capacity for carbon monoxide (DLCO) and the lowest oxygen saturation during 6-minute walk test (6MWT), shorter 6-minute walk test distance (6MWD), and larger decline in forced vital capacity during 6 months ( $\Delta$ -FVC), compared to survivors. Multivariate cox proportional analysis showed older age (HR=1.104, P<0.001), lower levels of lymphocytes in bronchoalveolar lavage fluid (BALF) (HR=0.975, P=0.022) and DLco (HR=0.949, P=0.001), and larger  $\Delta$ -FVC (HR=0.951, P=0.030) independently associated with poor prognosis. **Conclusions:** Patients with cHP showed median survival of 86.1 months. Old age, low levels of BALF lymphocyte, and poor lung function mean poor prognosis.



## Epidemiology of nontuberculous mycobacteria in ulsan from 2011 - 2017: secondary hospital experience.

동강병원

\*정유인, 류영하

**Background/Aims:** The world-wide differences in geographical distribution of nontuberculous mycobacteria (NTM) isolation is being revealed. Yet, the epidemiology of nontuberculous mycobacteria (NTM) isolation in South Korea is not well documented. The most common isolated NTM species in South Korea is *M. avium* complex (MAC) and second most common species is *M. abscessus* complex (MABC). One study from Ulsan university Hospital, the distribution of nontuberculous mycobacteria (NTM) in Ulsan area, unlike the national distribution, *M. kansasii* was second most common species. In order to clarify the epidemiology, we investigated the epidemiology of nontuberculous mycobacteria (NTM) isolation in secondary hospital in Ulsan. **Methods:** All acid-fast bacilli (AFB) cultures from respiratory specimens were collected at Dongkang hospital, Ulsan, Korea from January 2011 to July 2017. The distribution of culture-positive NTM species was analyzed. **Results:** A total of 13,233 AFB cultures were performed in 7,899 patients. There were 387 AFB culture-positive specimens (patients). 304 cases of *Mycobacterium tuberculosis* (MTB) culture positive specimens and 83 cases of NTM culture positive specimens were identified. Among 83 cases of NTM culture positive specimens, NTM identification was available in 58 cases. The most common NTM species was *M. intracellulare* (29/58, 50%), followed by *M. kansasii* (14/58, 24.1%), *M. avium* (5/58, 8.6%), *M. abscessus* (2/58, 3.4%). **Conclusions:** The epidemiology of Ulsan area was different from other cities in South Korea. Ulsan University of hospital reported the epidemiology of NTM isolation as, the most common NTM species was *M. intracellulare* (356/999, 36%), followed by *M. kansasii* (295/999, 30%), *M. avium* (161/999, 16%), *M. abscessus* (117/999, 12%). The data is consistent with our findings and frequency order. The characteristic of AFB culture positive NTM in Ulsan area is different from the overall rate in Korea, *M. kansasii* is the second most common species.

Table 1. Total NTM identification from 2011-2017.

NTM species	number	%
<i>M. intracellulare</i>	29	50.0%
<i>M. avium</i>	5	8.6%
<i>M. abscessus</i>	2	3.4%
<i>M. kansasii</i>	14	24.1%
<i>M. fortuitum</i>	1	1.7%
<i>M. genavense</i>	1	1.7%
<i>M. massiliense</i>	1	1.7%
<i>M. chelonae</i>	0	0.0%
<i>M. terrae</i>	0	0.0%
<i>M. scrofulaceum</i>	0	0.0%
<i>M. xenopi</i>	0	0.0%
<i>M. szulgai</i>	1	1.7%
<i>M. goodii</i>	2	3.4%
miscellaneous	2	3.4%
Total	58	100.0%

Table 2. Patients characteristics of MAC (*M. avium* complex) and *M. kansasii*

	MAC (n=34)		<i>M. kansasii</i> (n=14)	
Age (year)	69.9		60	
Sex (male, %)	26		64	
CT findings				
Nodules	29	85.3%	11	78.6%
Bronchiectasis	17	50.0%	8	57.1%
Fibrocavitary lesion	13	38.2%	4	28.6%
Use of inhaled steroid	6	17.6%	5	35.7%
Combined pulmonary disease				
Bronchiectasis	17	58.6%	6	42.9%
Tuberculosis (TB) destroyed lung	19	65.5%	8	57.1%
Chronic obstructive lung disease	5	17.2%	5	35.7%
Pneumoconiosis	0	0.0%	0	0.0%
Asthma	1	3.4%	0	0.0%
Idiopathic pulmonary fibrosis	1	2.9%	2	14.3%