AB1346

THE CLINICAL COURSE OF PATIENTS WITH BIOLOGICS-TREATED RHEUMATOID ARTHRITIS COMPLICATED WITH NONTUBERCULOUS MYCOBACTERIAL LUNG INFECTION

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Background: For now, it has been difficult for rheumatoid arthritis (RA) patients with lung nontuberculous mycobacterial infection (LNTMI) to achieve therapeutic goal of RA because of insufficient treatment considering the risk of NTM deterioration by immunosuppressive therapy. Although use of biologics in RA with LNTMI is not recommended based on results of an epidemiological study from USA,^{1,2} prognosis analysis considering confounding factors, including the species of NTM, remains to be studied. On the other hand, some Japanese case series of RA with LNTMI after biological treatment had shown the acceptable outcomes.³

Objectives: This study was performed in order to investigate clinical course of patients with biologics-treated RA complicated with LNTMI.

Methods: This study is descriptive study. All the patients diagnosed with RA and proved the positivity of acid fasting culture were extracted. We retrospectively collected the clinical data between 1^{Jan 2011} and 31^{Mar 2017} including age, sex, date of RA onset, onset of NTM infection, species of NTM organisms, biologic drugs used, the clinical course, the findings of high resolution computed tomography (HRCT) and the outcome after commencement of biologics, at Tokyo Metropolitan Tama Medical Centre. The diagnosis of LNTMI was made by satisfying both of the two following conditions;¹ either positivity of bronchoalveolar lavage fluid culture at least once or sputum culture twice or more and² the compatible findings with LNTMI on HRCT.

Results: During investigation period, 13 LNTMI-RA patients were administered biologics, of which 76.9% were female. Their mean age at NTM diagnosis was 71 years old. The duration between the RA diagnosis and the occurrence of LNTMI ranged widely from 1 to 40 years. The species of NTM were *Mycobacterium avium* (12 cases) and *M. intracellulare* (1 case), which did not include rapid growing species. Twelve cases had treated with glucocorticoid. Of 10 cases who underwent biologics therapy after NTM diagnosis, 6 had continued biologics after diagnosis of LNTMI. All the 4 of the 13 cases who first received biologics after diagnosis of LNTMI were treated with abatacept, which improved their RA activity and did not exacerbate LNTMI. Of the 13, there were no patients requiring home oxygen therapy. During the average observational period after LNTMI of 3.6 years (0.8–10.3 years), 10 of the 13 were alive and 3 died, whose causes of death were not directly associated with LNTMI. When each period upon every biologics was independently calculated, the Kaplan-Meier survival curve illustrated the tendency of survival difference of between LNTMI-RA cases treated with non-TNF inhibitors and those with TNF inhibitors (figure 1).

Abstract AB1346 – Figure 1

Conclusions: Even when patients with RA have LNTMI of not rapid growing species, RA may be safely and sufficiently treated by abatacept with careful monitoring of the respiratory condition, which may improve their joint prognosis.

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AB1347

ELEVATED NESFATIN-1 LEVELS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Recent studies indicate that adipokines affect tissues and cells involved in rheumatoid arthritis (RA), including synovium, cartilage, bone, and immune cells.^{1,2,3} Nesfatin-1, a member of the adipokine family, was identified in 2006 as a potent anorexigenic peptide involved in the regulation of homeostatic feeding. Nesfatin-1 concentrations in serum and synovial fluid were closely correlated with disease occurrence and severity of knee osteoarthritis.⁴ We did not find any data about Nesfatin-1 levels in sera of rheumatoid arthritis (RA) patients.

Objectives: To investigate the serum nesfatin-1 level in RA patients.

Methods: At baseline we measured Nesfatin-1 level in sera of 110 RA patients (mean age 54.07±11.32; hereinafter M±Std.dev.) and 60 healthy controls (52.09±14.12). The diagnosis of RA was set according to the ACR/^{EULAR Classification Criteria for RA (2010)}

Serum C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR) were measured to assess inflammation severity. Nesfatin-1 in serum was determined by enzyme-linked immunosorbent assay (RaiBiotech, cat№ EIA-NESF).

Results: We revealed that nesfatin-1 levels in RA patients was equal 50.49±34.05 ng/ml and was higher than of healthy controls – 31.61±3.17 ng/ml. We divided 120 RA patients into 2 subgroups – 1st (n=44) with normal nesfatin-1 concentration in sera, and 2nd (n=66) – with increased nesfatin-1 level. We noted that 2nd group's patients had higher DAS28 activity index, functional joints disability, higher levels CRP and ESR.

Conclusions: The present study shows that RA patients have increased serum Nesfatin-1 levels which strongly correlated with systemic inflammation and functional impairment in RA. These data sustained the pathogenic role of Nesfatin-1 in RA progression.

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AB1348

PREVALENCE, GENDER-PREDOMINANCE AND CLINICAL PRESENTATION OF BEHÇET'S DISEASE IN EGYPT: PRELIMINARY FINDINGS FROM A MULTICENTER NATIONWIDE STUDY

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