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Editorial

Vaccination of patients with autoimmune inflammatory rheumatic disease: physicians' perspectives

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Infectious disease is one of the leading causes of morbidity and mortality in patients with autoimmune inflammatory rheumatic disease (AIIRD). The risk of infection is high in various rheumatic diseases including rheumatoid arthritis, systemic lupus erythematosus, systemic sclerosis, polymyositis, and dermatomyositis [1,2]. The vulnerability for infections in patients with AIIRD was considered to be via alteration of immunoregulation, disease severity, combined diseases, and immunosuppressive agents [3]. Furer et al. [4] reported patients with AIIRD to be associated with an increased risk of vaccine preventable infections including influenza, pneumococcal, herpes zoster, and human papillomavirus infections. There have been several vaccination guidelines for patients with AIIRD. The American College of Rheumatology (ACR) and the European Alliance of Associations for Rheumatology (EULAR) periodically announce vaccination guidelines for patients with AIIRD [5,6]. In Korea, there was a practice guideline for vaccinating Korean patients with AIIRD [7]. However, the real-world data showed that the vaccination coverage rate for patients with AIIRD is low [8,9]. There may be several reasons for low vaccination rate. First, the cause can be considered to arise from the patient's perspective. A study from Australia reported that vaccine hesitancy in patients with inflammatory arthritis was caused by uncertainty and lack of information about which vaccines were recommended [10]; only 43% of patients knew which vaccines were recommended for them. In case of COVID-19 vaccine, concerns about the side-effects, safety, and rapid development of vaccines made patients with AIIRD reluctant to receive the vaccine [11]. In addition, there was a concern about disease flare after COVID-19 vaccination. Nevertheless, COVID-19 vaccine was recommended for patients with AIIRD because the benefits of vaccination outweigh the potential risks [12].

In addition to the patients' cause, factors related to the physician seem to contribute to the low vaccination rate. Seo et al. [13] reported the results of the physician's agreement and implementation of the 2019 EULAR vaccination guideline. They received answers from 371 healthcare professionals from various continents including Asia, North America, Europe, and South America. The rate of physician's agreement for most of the 2019 EULAR vaccination guidelines was high, except for a few items; however the rate of implementation was low. This implies that there was a discrepancy between their knowledge and actual practice, which may be due to various reasons. As the authors indicated, it is possible that the rheumatologists do not prioritize vaccination in their routine clinical practice. Some recommendations are not followed well in practice because of physicians' disagreement or their unfamiliarity with those items, such as live-attenuated vaccines and yellow fever vaccine. In another study, they analyzed the reasons for non-adherence of physicians to the vaccination guidelines [14]. The main causes of non-adherence were lack of time and inexperience with vaccination. The most interesting part of that study was that the patient volume per clinic session and medical care setting were not associated with the vaccination rate. In addition, the study presented the difference in perspectives on who was primarily responsible for vaccination according to continents. Only ap-

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proximately 40% of participants in Europe and North America responded that rheumatologists were primarily responsible for vaccination. In contrast, over 70% of participants in Asia answered that rheumatologists have a primary responsibility.

We have been through the pandemic of COVID-19 for 3 years. Despite the many myths, misunderstandings, and inaccuracies in the knowledge about COVID-19 vaccine, it cannot be denied that vaccination was effective in reducing the morbidity and mortality rate. As suggested by various vaccination guidelines, rheumatologists should take charge of the vaccination for patients with AIIRD [6,15]. The rate of vaccination coverage can be increased through several methods. It is necessary that vaccination records be included in the initial assessment and the need for further vaccination be assessed yearly. Institutional support can improve the clinical situation. A study by Seo et al. [14] showed that lack of time was the main cause of non-adherence to vaccination guidelines. If the number of consultation hours per patient increases, physicians can pay more attention to the vaccination status. Moreover, an electronic decision support system can be helpful. A study revealed that the electronic identification and alert system in electronic health records significantly improved the pneumococcal vaccination rate [16]. Thus, a change in the perspective and efforts of the physician are important. Correct information and individualized plan of vaccination should be provided to the patients, and a shared decision making between physicians and patients should be encouraged. These multidisciplinary efforts can improve the rate of vaccination coverage for patients with AIIRD.

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CONFLICT OF INTEREST

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