Symbiosis

ISSN Online: 2475-4676
www.symbiosisonlinepublishing.com

Editorial

Journal of Rheumatology and Arthritic Diseases Open Access

Rheumatoid Arthritis and Malignancy

Safaa Ali Mahran*

Associate Professor Rheumatology and Rehabilitation, Assiut University, Assiut, Egypt

Received: April 15, 2019; Accepted: April 18, 2019; Published: April 22, 2019

***Corresponding author:** Safaa Ali Mahran, Associate Professor Rheumatology and Rehabilitation, Assiut University, Assiut, Egypt. E-mail: Safaa.mahran@aun.edu.eg or Safaa69@yahoo.com*

Abstract

Treating a rheumatoid patient who has a current or history of malignancy is a real challenge. Although biological therapy shows great success in treating RA, they carry a long-term risk of malignancy. Choosing which drug to use should be thought of carefully to avoid doubling the chance of developing cancer.

Keywords: Rheumatoid Arthritis; Malignancy; Cancer; Biological Treatment

Compared to the general population, Rheumatoid Arthritis (RA) patients seem to have similar risk for malignancy. However, some organ specific cancers were found to be of higher incidence in RA like non melanomatous skin cancer, lung cancer and lymphomas [1, 2].

Some studies reported the incidence of lung cancer to be 20-80% higher, and lymphoma to be 60-90% higher and non-lymphomatous skin cancer as twice as in the general population [3,4].

Some RA medications especially immunosuppressants were associated with increased risk of cancer. Methotrexate was reported to increase the lymphoma incidence [5].

The claimed anti-tumor activity of sulfasalazine has not been proved clinically [6].

Carcinogenetic potential of chloroquine, hydroxychloroquine and leflunomide was not studied well in man but studies on rats failed to show any evidence of increased cancer risk.

Corticosteroids are used as bridge therapy in RA. The association of steroids and malignancy have been reported especially with the malignant melanomas, basal cell carcinoma, squamous cell carcinoma and non-Hodgkin lymphoma [7].

Tumor necrosis factor inhibitor (TNFi) increases the risk of all malignancies in RA patients [8].

However, some other studies reported that TNF inhibitors may accelerate the diagnosis of cancer in the first 6 to 12 months of treatment but probably do not increase long-term cancer risk [9,10].

In RA patients with recent history of malignancy, no enough data is available about the effect of biologics on cancer recurrence, however in patients with old history of malignancy, observational data claims no increase in overall cancer recurrence rate [11].

Treating a RA patient with a concomitant cancer is a challenge, especially with the lack of clinical evidences and guidelines. A thorough history of the malignant condition and its medication is mandatory.

Some cancer medications help controlling RA activity, others may induce rheumatic manifestations that will disappear after the discontinuation of these drugs.

If the RA and the malignancy are independent, a consultation of the oncologist is the first step before initiating the treatment with immunosuppressive or DMARD therapy.

Methotrexate seems to be of safe profile. Mycophenolate mofetil has shown a lower risk of malignancy in general. Caution should be practiced in cases to be treated with TNFi.

In conclusion, in rheumatoid patients with past or current history of malignancy, thorough clinical assessment together with a detailed medical reconciliation and consultation of an oncologist are mandatory to reach a proper plan for treatment.

References

1. Raaschou P, Simard JF, Asker Hagelberg C, Askling J. Rheumatoid arthritis, anti-tumour necrosis factor treatment, and risk of squamous cell and basal cell skin cancer: cohort study based on nationwide prospectively recorded data from Sweden. BMJ. 2016;352:i262. Doi: 10.1136/bmj.i262
2. Simon TA, Thompson A, Gandhi KK, Hochberg MC, Suissa S. Incidence of malignancy in adult patients with rheumatoid arthritis: a meta-analysis. Arthritis Res Ther. 2015;17:212. Doi: 10.1186/s13075-015-0728-9
3. Setoguchi S, Solomon DH, Weinblatt ME, Katz JN, Avorn J, Glynn RJ, et al. Tumor necrosis factor alpha antagonist use and cancer in patients with rheumatoid arthritis. Arthritis Rheum. 2006;54(9):2757-2764.
4. Hemminki K, Li X, Sundquist K, Sundquist J. Cancer risk in hospitalized rheumatoid arthritis patients. Rheumatology (Oxford). 2008;47(5):698-701. Doi: 10.1093/rheumatology/ken130
5. Georgescu L, Quinn GC, Schwartzman S, Paget SA. Lymphoma in patients with rheumatoid arthritis: association with the disease state or methotrexate treatment. Semin Arthritis Rheum. 1997;26(6):794-804.

 ***Corresponding author email:** Safaa.mahran@aun.edu.eg or Safaa69@yahoo.com*

6. Weber CK, Liptay S, Wirth T, Adler G, Schmid RM. Suppression of NK-kappaB activity by sulfasalazine is mediated by direct inhibition of IkappaB kinase alpha and beta. Gastroenterology. 2000;119(5):1209-1218.
7. Jensen AØ, Thomsen HF, Engebjerg MC, Olesen AB, Friis S, Karagas MR, et al. Use of oral glucocorticoids and risk of skin cancer and non-Hodgkin's lymphoma: a population-based case-control study. Br J Cancer. 2009;100(1):200-205. Doi: 10.1038/sj.bjc.6604796
8. Amari W, Zeringue AL, McDonald JR, Caplan L, Eisen SA, Ranganathan P. Risk of non-melanoma skin cancer in a national cohort of veterans with rheumatoid arthritis. Rheumatology (Oxford). 2011;50(8):1431-1439. Doi: 10.1093/rheumatology/ker113
9. Bongartz T, Sutton AJ, Sweeting MJ, Buchan I, Matteson EL, Montori V. Anti- TNF antibody therapy in rheumatoid arthritis and the risk of serious infections and malignancies: systematic review and meta-analysis of rare harmful effects in randomized controlled trials. JAMA. 2006;295(19):2275-2285.
10. Wolfe F, Michaud K. Lymphoma in rheumatoid arthritis: the effect of methotrexate and anti-tumor necrosis factor therapy in 18,572 patients. Arthritis Rheum. 2004;50(6):1740-1751.
11. Regierer AC, Strangfeld A. Rheumatoid arthritis treatment in patients with a history of cancer. Curr Opin Rheumatol. 2018;30(3):288-294. Doi: 10.1097/BOR.0000000000000492