Reduced incidence of extra-articular manifestations of RA through effective disease control: Karnataka Rheumatoid Arthritis Comorbidity (KRAC) study.

Chandrashekar S¹, Shobha V², Dharmanand BG³, Jois R⁴, Kumar S⁵, Mahendranath KM⁶, Haridas V⁷, Prasad S⁸, Singh Y⁹, Daware MA¹⁰, Swamy A¹¹, Subramanian R¹², Somashekar SA¹³, Shanappa AM¹⁴, Anupama Kr¹⁵.

Author information: ¹ChanRe Rheumatology and Immunology Center, Bangalore, Karnataka, India. ²St. John’s Medical College Hospital, Bangalore, Karnataka, India. ³Sakra Hospital, Bangalore, Karnataka, India. ⁴Karnava Diagnostics Center, Bangalore, Karnataka, India. ⁵Columbia Asia Hospital, Bangalore, Karnataka, India. ⁶Samarpan Health Centre, Bangalore, Karnataka, India. ⁷Arthritis Superspeciality Center, Hubli, Karnataka, India. ⁸Vikram Hospital Pvt. Ltd., Mysore, Karnataka, India. ⁹Manipal Hospital, Mysore, Karnataka, India. ¹⁰Narayana Health City, Mysore, Karnataka, India. ¹¹Arunag Clinic, Mysore, Karnataka, India. ¹²JSS Medical College, Mysore, Karnataka, India. ¹³Bangalore Rheumatology Center, Bangalore, India. ¹⁴Arushi Rheumatology Center, Turunct, India.

ABSTRACT

AIM
To estimate the prevalence of extra-articular manifestations (EAM) in rheumatoid arthritis (RA) patients and the impact of demographic, clinical and treatment factors.

METHODS
The study was carried out as part of ‘Karnataka Rheumatoid arthritis comorbidity (KRAC) study’ conducted at 14 centers across Karnataka, India between September 2014 and July 2015. The data were collected by trained clinical research associates using a structured pro forma, under the supervision of the consulting rheumatologists. Based on the factors evaluated, the study participants were classified as follows: age, < 30 years, 30-39 years, 40-49 years, 50-59 years and ≥ 60 years; and duration of illness prior to visiting rheumatologist (DOIP), ≤ 6 months, > 6 months-2 years, 2-10 years and > 10 years. The Disease Activity Score of 28 joints-3 (erythrocyte sedimentation rate) score was calculated for each patient by three variable methods.

RESULTS
The total number of patients considered for the study after exclusion was 1716. The subjects had a mean (SD) age of 48.1 (12.71) years, the male-to-female ratio was 1 : 5, and median (range) of duration of RA was 48 (0.5-484) months. The prevalence of EAM noted was around 13%. EAM were more likely during the first 2 years of the disease (odds ratio [OR]: 1.465; P = 0.047) and increased with longer DOIP. The incidence was less in patients with low disease activity (OR: 0.657) and worse with the presence of deformities (OR: 2.1).

CONCLUSION
The study corroborates the current concept of effective disease control to reduce the incidence/likelihood of EAM in RA patients.