Abstract #34830

Click here to print this page now.

Clinical Joint Involvement Is Decisive For Radiographic Progression

You must complete the following before submitting:

- Disclosure
  ○ Complete a disclosure for all authors.

Program Book Publication:
Miriam Gärtner, Medical University of Vienna

Abstract Supplement and Online Publication:
These authors will be published in a supplement of the Arthritis & Rheumatism journal (on-line only) as well as the abstracts section of the My Annual Meeting website (www.ACRannualmeeting.org).

Miriam Gärtner1, Farideh Alasti1, Gabriela Supp1, Josef S. Smolen2 and Daniel Aletaha1,
1Medical University of Vienna, 2Medical University of Vienna and Hietzing Hospital

Abstract Text
Character count for abstract text: 2707 (43 Characters Remaining)

Background/Purpose:
Today’s therapeutic targets in rheumatoid arthritis (RA) are remission or low disease activity, but it was shown that joint damage may continue to progress despite these favourable clinical states.1;2 While progression of joint damage is related to joint swelling,3 radiographic damage may progress even without evidence of clinical synovitis, at least in early RA.4

It was the aim of this study, to evaluate the frequency of radiographic progression in clinically persistently inactive joints of patients with established RA.

Methods:
We included 134 RA patients (mean disease duration: 7.12±9.5yrs.) who showed a radiographic progression (increase>1) in any of the joints assessed by the Sharp van der Heijde (SvdH) score over an observational period of 3-5 years. To conform with the records of clinical joint assessment, we only considered radiographic progression in any of the 22 hand/finger joints (10 proximal interphalangeal joints, 10 metacarpophalangeal joints, 2 wrists), but excluded the feet (not assessed by the 28 joint count). Clinical data on individual joints (swelling and tenderness) from each clinical visit performed between one year prior to the baseline x-ray until the time of the x-ray endpoint were collected from the patient charts. We evaluated associations of clinical joint activity (swelling and tenderness) and radiographic progression on the individual joint level.

Results:
The mean±SD time between x-rays was 3.5±0.4yrs and the mean number of clinical visits per patient was 16.2±4.6. A total of 195 (6.6%) of the 2948 evaluated joints showed progression in erosions and 343 (12.7%) worsened in joint space narrowing (JSN). Of all joints with progression in erosions, 64 (32.8%) were never swollen during the observation period (in 40 patients) and only 18 (9.2%) never showed any activity also by tenderness.

In the total patient population, progression was higher in joints with clinical swelling (during the observation period) compared to joints without swelling (1.76±1.06 vs 1.28±0.68; p=0.01). We found a significantly higher baseline SvdH Score in patients with radiographic progression in clinically inactive joints vs. active joints (68.2±76.8 vs 42.5±51.2; p=0.022). The overall sensitivity for progression of damage of any joint activity during the observation period was 73.1% for erosion, and 73.5% for JSN. Only 25.6% of the patients showing radiographic progression in clinically inactive joints were treated with a biological during the majority (>50%) of the observation period.

Conclusion:
Only 9% of joints with radiographic progression in patients with established RA show continued absences of clinical activity by both swelling and tenderness, and their degree of progression is low. Thus, structural progression without evidence of clinical activity is a negligible event on joint level. Risk factors of this are high baseline radiographic scores and absence of biological treatment, but the strongest risk factor for progression remains to be clinical joint involvement.

Reference
(1) Aletaha D et al. Arthritis Rheum2009; 60(5)
(2) Molenaar ET et al.. Arthritis Rheum2004
(3) van Riel PL et al. J Rheumatol1995

Disclosure:M. Gärtner, None; F. Alasti, None; G. Supp, None; J. S. Smolen, None; D. Aletaha, None.

Topic Selection: Health Services Research, Quality Measures and Quality of Care
We have agreed to the following statements:

I. I affirm that I have read and agree to the ACR Annual Meeting general guidelines and policies for abstract submission outlined in the 2013 Call for Abstracts Brochure.

II. I affirm that any work with human or animal subjects reported in the abstract complies with the guiding principles for experimental procedures found in the Declaration of Helsinki of the World Medical Association.

III. I understand that case reports are not acceptable and will not be reviewed.

IV. I understand that if the abstract reports the results of a clinical trial not yet approved by a regulatory agency, the trial phase must be indicated on the submission form.

V. I understand that an abstract is ineligible for consideration if it reports work that has been accepted for publication as a manuscript prior to the ACR submission deadline of Tuesday, June 25, 2013.

VI. I understand that this abstract, if accepted, will be under embargo until 4:30 PM Pacific Time on Saturday, October 26, 2013.

VII. I understand that abstracts submitted for the ARHP may not be dually submitted to the ACR and vice versa.

VIII. I understand that, if accepted, the American College of Rheumatology has permission to publish this abstract in printed and/or electronic formats.

IX. I understand that, if accepted for presentation, the presenting author or co-authors listed on the abstract must present the abstract during an oral and/or poster presentation.

First Author

Presenting Author
Miriam Gärtner, MD
Medical University of Vienna
Währinger Gürtel 18-20
Department of Internal Medicine III, Division of Rheumatology
Vienna, Austria
Email: miriam.gaertner@meduniwien.ac.at -- Will not be published

Author Classification: Resident, Internal medicine - R1

Second Author

Farideh Alasti, MSc
Medical University of Vienna
Department of Medicine III, Division of Rheumatology
Vienna, Austria
Phone Number: 431404004908
Fax Number: 431404004306
Email: farideh.alasti@meduniwien.ac.at -- Will not be published

Author Classification: Not applicable (Non-Trainee)

Third Author

Gabriela Supp, MSc
Medical University of Vienna
Waehringer Guertel 18-20
Department of Internal Medicine III; Division of Rheumatology
Vienna, 1070 Austria
Email: gabriela.supp@meduniwien.ac.at -- Will not be published

Author Classification: Not applicable (Non-Trainee)
MISSING DISCLOSURE - all author CME disclosures must be added before your submission can be considered complete.

Author Classification: Not applicable (Non-Trainee)