Very low prevalence of ultrasound determined tendon abnormalities in healthy subjects throughout the age range: OMERACT ultrasound minimal disease study

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Methods: Adult HS without joint pain (VAS <10/100), hand osteoarthritis (ACR criteria), or inflammatory arthropathy were recruited in 23 international centres from Aug 2017–Dec 2018. MCP,PIP and wrist joints were clinically examined. Bilateral digit flexor (DF) 1-5 and extensor carpi ulnaris (ECU) tendons were scanned for tenosynovial hypertrophy (TSH) and power Doppler (PD) signal and graded (OMERACT US scoring system1).

A comparison cohort of DMARD-naive patients with RA (ACR-EULAR 2010 and 1987 criteria) at presentation was taken from the Birmingham Early Arthritis (BEACON) inception cohort, who underwent identical tendon US assessment. They were grouped into ≤12 and >12 weeks from symptom onset.

Results: Data from 899 HS and 144 RA patients were included. DF ≤1 TSH: 8 (0.2) 9 (0.3) 2 1 (0.1) 54 (18) HS <0.001 0.06 <0.001 0.06 1 MIRI of the cranio-cervical junction in rheumatoid arthritis — definition of normal and pathological findings

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Background: In rheumatoid arthritis (RA), disease involvement at the cervical spine can be malalignment resulting in severe neurological impairment. To date, malalignment is defined based on X-rays. The aim of this investigation was to systematically define osseous and ligamentous MIRI-findings in cranio-cervical RA in May 2019. Copyright © 2019 BMJ Publishing Group Ltd. All rights reserved.
PREVENTION OF ACTIVE TUBERCULOSIS INFECTION USING INTERFERON GAMMA RELEASING ASSAY (IGRA) IN PATIENTS WITH RHEUMATOID ARTHRITIS UNDERGOING TUMOR NECROSIS FACTOR-ALPHA INHIBITORS TREATMENT

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Background: Data on effectiveness reducing incidence of active tuberculosis (TB) by use of interferon gamma releasing assay (IGRA) have not yet been available.

Objectives: To evaluate whether diagnosis of latent tuberculosis infection (LTBI) using IGRA is effective in reducing occurrence of active-TB among patients with RA who will use Tumor Necrosis Factor alpha inhibitors (TNFi).

Methods: A retrospective cohort study was conducted using the National Health Information Database of Korea between 2008 and 2017. The enrollees had at least two claims with the RA diagnosis code, and had at least one prescription for TNFi since 2009 when national insurance of Korea started to cover the expense of IGRA. Exclusion criteria were organ transplantation, HIV infection, or active TB infection within 1 year prior to enrollment. The follow up was initiated on the day of the first prescription for TNFi, and ended on the date of the first claim on active TB, the date of death or December 31, 2017 whichever came first. The utilization of IGRA test was confirmed by the codes for tuberculin skin test (TST) and IGRA claimed within 2 months prior to the initiation of the TNFi. Patients were categorized into 3 groups: no-test, TST only, IGRA (IGRA only or IGRA and TST). The incidence of active TB was defined as the presence of claims with diagnosis code for TB and the start of standard 3-drug or 4-drug first line anti-TB medication combination therapy.

Descriptive statistics on baseline characteristics of participants in each group were presented before and after application of weighting method using standardized mortality rate weight (SMRW). The incidence of active TB in each group was presented as event per 1000 person-year (PY). We treat death as competing event to the occurrence of TB. Therefore a sub-distributional hazard model was used to calculate weighted hazard ratio (wHR) and 95% confidence intervals (95% CI). Results: Among the 27,021 patients who started TNFi, 15,538 RA patients were included in the analysis through inclusion and exclusion criteria. There were 6,287 patients in the no-test group, 4,677 patients in the TST group, and 4,574 patients in the IGRA group. Diabetes mellitus, chronic kidney disease, and congestive heart failure were more prevalent in IGRA group, while stroke was observed less frequently in IGRA group. After weighting using SMRW, all confounders were well balanced. During the follow up period, 4.24, 4.93, and 4.01 active TB events per 1,000 PY were observed for no-test, TST, and IGRA group, respectively. The death rate was 8.93, 9.75 and 7.96 per 1,000 PY for no-test, TST, and IGRA group, respectively. Considering death as competing event, IGRA significantly reduced the risk of active TB than no-test group (wHR 0.628, 95% CI: 0.459-0.859) and TST group (wHR 0.416, 95% CI: 0.311-0.556).

Conclusion: The incidence of active TB in RA patients using TNFi could be reduced by use of IGRA.

REFERENCES:


Disclosure of Interests: None declared.


Public health, health services research, and health economics

FACTORS RELATED TO NON-ADHERENCE BEHAVIORS OF PATIENTS WITH RHEUMATIC DISEASES

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Background: Non-adherence to medication may lead to poorer clinical outcomes and should be prevented.

Objectives: We describe the frequency of non-adherence behaviors in patients with rheumatic diseases and its relationship to potentially modifiable variables.

Methods: Data were obtained through an anonymous survey handed to patients by physicians or nurses from 25 rheumatology clinics from Spain. Patients completed the survey anonymously at home and returned it by pre-paid post mail. Five different non-adherence behaviors were defined. Co-variables analyzed were patients’ demographics, medication characteristics, experience with healthcare (assessed with IEXPAC “Instrument to Evaluate the Experience of PAintients with Chronic diseases” scoring 0 [worst] to 10 [best experience]), and beliefs in medicines (Beliefs About Medicines Questionnaire [BMQ], composed of a necessity and a concerns subscales and scoring -20 [weaker] to +20 [stronger beliefs]). Variables associated to non-adherence were studied with a multivariate logistic regression model.

Results: The survey was handed to 625 patients with rheumatic diseases, of which 336 (53.8%) returned it with the necessary data completed (mean age 55 [14] years, 64% women). Of them, 188 (56.0%) described at least one non-adherence behavior. The frequencies of the specific non-adherence behaviors were: 1) Forgettingness in taking medication: 28.6%; 2) Taking medication at unscheduled hours: 5.6%; 3) Stopping medication when feeling well: 10.1%; 4) Stopping medication when feeling sick: 33.0% and 5) Stopping medication after reading the patients information leaflet: 11.5%. The frequency of at least one non-adherence behavior was similar by age, gender, educational level, working status or by number of medicines. It was slightly higher in patients needing to take their medication 3-4 times a day (63.2%) versus 1-2 times a day (52.4%, p= 0.089). IEXPAC scores were similar in patients with or without non-adherence behaviors (5.5 [2.0] in both groups, p= 0.960). BMQ overall score was lower in patients with non-adherence behaviors (4.3 versus 5.1 in those without non-adherence behaviors, p< 0.001). The frequency of non-adherence behaviors did not differ by quartiles of IEXPAC score, but it was higher in patients with lower BMQ score (Q1: 59.5%, Q2: 65.9%, Q3: 54.3%, Q4: 52.0%, p-trend = 0.014). The multivariate model (table) confirmed a relationship of non-adherence behaviors with lower BMQ beliefs scores.

Conclusion: Non-adherence behaviors are frequent in patients with rheumatic diseases and are mainly associated to patients’ beliefs in their medications (assessed with BMQ). This is an important aspect that can