ankylosing spondylitis (AS) and non-radiographic (nr-) axSpA based on the presence of or absence of definite structural changes in conventional radiographs (CR).

**Objectives:** Aim of this study was to determine whether comorbidities and gender could lead to a different response rate to anti-TNF (r-axSpA) in ESpA patients. Methods: r-axSpA patients treated with TNFi (adalimumab (ADA) or infliximab (IFX)) were retrospectively evaluated between November 2018 and October 2020 and divided in two cohort according to gender. In addition, TNFi treatments line/s, effectiveness and reasons of discontinuations, as inefficacy, intolerance, acute adverse reaction, development of infections and other causes, were evaluated at baseline (T0), at T6 (T12), and at T24 (T48) months of therapy. Patients who were failure to at least two TNFi were considered as "multifailure". Statistical analyses were performed using chi square/Fisher tests and variance analysis (SPSS software).

**Results:** 120 ESpA patients (M 40.42%; F 40.18%) treated with TNFi were evaluated. Clinical and laboratory baseline (T0) characteristics are summarized in Table 1. AS subtype was more common in men (39.5%) than in women (14.3%); p=0.03. Concerning comorbidities, hypertension and anemia were more prevalent in men than women (25% vs 9%; p=0.01; 11.6% vs 13%, p=0.02, respectively), while thyroepathy and psychiatric disorders were more common in female than male (11.7% vs 0%; p=0.02; 16.9% vs 4.6%, p=0.04, respectively). No difference was observed between genders in distribution of BMI, smokers, disease duration, HLAB27 positivity and presence of extra-articular manifestations. 202 TNFi treatments (50.9% ADA and 24.3% IFX) were evaluated in 120 patients [74 treatments (36.6%) in 43 men; 128 treatments (63.4%) in 77 women]. Considering treatment effectiveness, higher prevalence of failure was observed in woman that in men (67.2% vs 39.2%, p=0.0005). Moreover, women with psychiatric disorders underwent more lines treatment that men (16.8% vs 4.6%, p=0.01, OR=4). On the other hand, men with hypertension, were more multifailure compared with women (25.6% vs 16.3%; p=0.01, OR=3). No other differences according to gender were found. At T6, 7.5% of patients (n=9) had acute adverse reaction (n=1 with ADA; n=8 with IFX); at T12, 14.2% of patients (n=17) had IBD inefficacy. At T24, secondary inefficacy on IBD and/or SpA was the main cause of TNFi discontinuation compared with other causes (58.4% vs 41.6%; p=0.04), mostly in female cohort (40% vs 27.5% of patients; 128 treatments (63.4%) in 77 women). 336 patients 

![Image](https://i.imgur.com/336.png)

**Disclosure of Interests:** None declared.

**References:**

1. **Besseau** L, Harauzi F, Florica M, C. Lailiberte M, Khrashi M.
2. **Laval University, Centre Hospitalier de l’Universite Laval, Laval University, Centre Hospitalier de l’Universite Laval, Quebec City, Canada**; 3. **Institut de Rhumatologie de Montreal, Institut de rhumatologie de Montreal, Montreal, Canada**; 4. **University of Toronto, Toronto, University of Toronto, Toronto, Toronto, Canada**; 5. **AbbVie Corporation, AbbVie Corporation, Montreal, Canada**; 6. **Memorial University of Newfoundland, Memorial University of Newfoundland, St. John’s, Canada**

**Background:** COMPLETE-AS was a Canadian observational study among biologic-naive adults with active ankylosing spondylitis (AS) initiated on either adalimumab (ADA) or subsequent non-biologic disease-modifying anti-rheumatic drugs and/or non-steroidal anti-inflammatory drugs (nbDMARD/NSAID) after a switch from initial treatment due to inadequate response or intolerance, as per the judgement of the treating physician.

**Objectives:** The aim of this analysis was to assess the 24-month effectiveness of ADA compared to nbDMARD/NSAID in the management of heel enthesitis and extra-articular manifestations (EAMs).

**Methods:** Patients were enrolled between July 2011 and December 2017, and followed for up to 24 months. Patients were treated as per routine care and all analyses were performed using the intent-to-treat (ITT) approach. The disease outcomes assessed in this study included enthesitis (of the heel) and EAMs [inflammatory bowel disease (IBD), uveitis, and psoriasis (PsO)].

**Results:** A total of 452 patients treated with ADA and 187 patients receiving a subsequent nbDMARD/NSAID were enrolled in the study. Baseline characteristics were overall comparable between treatment groups: patients had a mean (SD) age of 42.7 (13.4) years, 55.6% were male, and 85.8% were Caucasian. The mean (SD) duration of AS since diagnosis was 5.6 (9.3) years. A total of 17.7%, 12.4%, 18.5%, and 16.3% of patients had experienced enthesitis, IBD, uveitis, and PsO, respectively at baseline. Disease severity (mean [SD] BASDAI) was however higher among ADA- vs. nbDMARD/NSAID-treated patients (6.4 [1.8] vs. 5.0 [1.8]; p<0.001).

In terms of the rates of first occurrence or flare-up/exacerbation of enthesitis and EAMs, statistically significant between-group differences were found, whereby ADA-treated patients had a 60% reduced rate of both uveitis [RR (95% CI): 0.4 (0.2–0.6)] and enthesitis [0.4 (0.2–0.7)] compared to nbDMARD/NSAID-treated patients. The rates of first occurrence or flare-up/exacerbation for IBD [1.1 (0.7–1.7)] and PsO [3.3 (0.9–12.7)] were statistically comparable between treatment groups.

The time to first occurrence of both enthesitis and uveitis was also statistically significant (p<0.05) between groups. ADA-treated patients had a 50% lower risk of enthesitis as a first occurrence compared to nbDMARD/NSAID-treated patients [HR (95% CI): 0.5 (0.3–0.9)], and an 80% lower risk of uveitis [0.2 (0.0–0.8)]. The time to first occurrence of IBD [0.7 (0.2–2.1)] and PsO [1.9 (0.8–4.6)], were statistically comparable between treatment groups.

**Conclusion:** Despite a comparable proportion of patients reporting baseline EAMs and enthesitis, patients treated with ADA were less likely to experience a first occurrence or flare-up/exacerbation, of both enthesitis and uveitis compared to patients treated with nbDMARD/NSAID. The results of this real-world Canadian study suggest that treatment with ADA among AS patients is more effective at the first occurrence/exacerbation of select EAMs and heel enthesitis.

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Background: Standard therapy for axial spondylarthritis (axSpA) is effective in inflammatory lesions of the axial skeleton and peripheral arthritis, but its effect on coxitis has not been studied.

Objectives: To assess the effectiveness of anti-TNF therapy for coxitis in patients with axSpA.

Methods: An open observational study was conducted. There were 56 patients with axSpA and coxitis for 2 years who received NSAIDs or NSAIDs+anti-TNF therapy in real clinical practice. The study included only those patients who completed a 2-year follow-up period. All patients regardless of complaints underwent X-ray examination of the pelvis, ultrasound and magnetic resonance imaging (MRI) of the hip joints. An increase in the cervical-capsular distance (CCD) of more than 7 mm and the presence of asymmetry between the joints of more than 1.5 mm were taken for coxitis on ultrasound of the hip joint. The presence of synovitis and/or osteitis was taken for coxitis on MRI. The average age was 31.1 ± 7.0 years, with an average duration of the disease 74.5 ± 100.1 months. HLA-B27 positive were 52 (92%) patients.

Results: A comparative analysis of clinical, laboratory and other parameters of the disease was carried out against the background of 2-year follow-up of patients who were constantly taking only NSAIDs or their combination with anti-TNF therapies (Table 1).

Table 1.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Group NSAIDs+/ anti-TNF</th>
<th>Group NSAIDs+</th>
<th>Group NSAIDs n=29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>after 2 y p</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>BASRI hip p&gt;2 n %</td>
<td>10 (37%) 18 (67%)</td>
<td>0.05 6 (21%) 14 (48%)</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>MRI coxitis n %</td>
<td>27 (100%) 19 (70%)</td>
<td>0.05 28 (97%) 24 (83%)</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>CCD/mm,Me [25</td>
<td>7.9 [70.82] 7.2 [61.83]</td>
<td>0.05 7.6 [69.78] 6.2 [5.67]</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>CRP/mg/L, Me [25</td>
<td>7.3 [23.74.5] 6.0 [2.173]</td>
<td>0.05 10.3 [29.18] 8.4 [2.918]</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>ESR, Me [25</td>
<td>5.25% 5.75%</td>
<td>25 [5.18] 15 [5.35.2]</td>
<td>0.05 13 [78.25] 13 [6.263]</td>
</tr>
<tr>
<td>ASDAS CRP, Me</td>
<td>25</td>
<td>3.9 [2.4.4.7] 2.9 [1.2.2.4]</td>
<td>&lt;0.05 2.8 [1.3.3.9] 2.6 [1.2.3]</td>
</tr>
<tr>
<td>BASDAI, Me [25</td>
<td>4.7 [2.4.6.2] 2.8 [2.0.3.7]</td>
<td>&lt;0.05 4.2 [2.4.5.8] 2.1 [2.2]</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>BASFI, Me [25</td>
<td>75%</td>
<td>4.0 [2.0.6.9] 1.9 [2.2.9]</td>
<td>&lt;0.05 1.2 [2.3.2.9] 0.9 [4.2.8]</td>
</tr>
</tbody>
</table>

Conclusion: 1. Anti-TNF+NSAIDs therapy with 2 years of use effectively controls the activity of axSpA. 2. Two-year therapy with NSAIDs in combination with anti-TNF, reduces the inflammation of hip joints in some patients according to ultrasound and MRI data. 3. The present study did not conclusively confirm that 2-year anti-TNF therapy with NSAIDs effectively prevents the progression of X-ray bursitis in axSpA. 4. Further studies are needed to improve the effectiveness of treatment of coxitis in axSpA.

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REFERENCES: