Objectives: The aim of this work was to compare the clinical and biological response to biotherapies with the presence of ADA and the residual dose rate.

Methods: We analysed the medical records of 69 patients treated with biotherapy between September 2017 and October 2018. Pathologies were considered: rheumatoid arthritis (RA) diagnosed by ACR/EULAR 2009 criteria, Spondyloarthritis (SPA) according to Assessment of Spondyloarthritis International Society (ASAS) And cohn’s disease (CD) classified upon the 2006 Montreal classification. We did search the presence of anti-body anti-drugs (ADA) and the residual dose for the following therapies: Etanercept (ETN), Infliximab (IFX), Adalimumab (Ada) or Rituximab (RTX).

Results: The mean age was 43.33 ± 11.4 year. The sexratio M/F was 1.57.

Regarding the RA: they were 13 patients. 10 had positive (ACPA) and seven positive (RF). All the patients had an initial treatment by conventional synthetic disease modifying antirheumatic drugs (csDMARDs) before moving to bDMARDs. 14 were in concomitant disease modifying therapy. The DAS28-ESR average was at 4.12 [2.67 à 5.79]. we found positive ADA in only one patient analysis. There were 8 responding versus five non-responding patients, according to the clinical and biological evaluation of disease activity.

28 patients were included in the SPA group: 13 with an spondylarthrosis. 14% had the HLAB 27. It was an active disease in 15 cases. ASDAS-CRP average was 4.87 ± 0.17 [4.7; 5]. The received biotherapy was IFX 50%, ETN 28.6% and Ada 21.4%. 10 patients had a positive ADA and 8 of them had a rate superior to 100 UI. 19 patients were considered as non-responding.

In the CD group, 28 patients were enrolled. All of them had a previous immunosuppressor treatment. Same patients in association with biotherapy. It was positive ADA in 7 cases. And 7 patients were non-responding to the treatment.

The residual dose of drugs was calculated for each drug and it is explained in the following table:

<table>
<thead>
<tr>
<th>IFX</th>
<th>Ada</th>
<th>ETN</th>
<th>RTX</th>
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</thead>
<tbody>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>N</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>High Residual dose</td>
<td>60%</td>
<td>21</td>
<td>52.9%</td>
</tr>
<tr>
<td>Low residual dose</td>
<td>40%</td>
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</table>

Positive ADA was associated with therapy failure in all type of biotherapy (p=0.001). A low residual dose was associate to therapy failure only in the case of IFX (p=0.005).

In multivariate analyses, the predictive factors associated with therapeutic failure were: positive ADA (p=0.008) and advanced age at diagnosis, below 30 years old age (p=0.020). Hosmer index=0.452.

Conclusion: Immune response induced in patients treated with biotherapies can be quantified now thanks to ADA dosage and the residual dose assessment.

REFERENCES

Disclosure of Interests: None declared

AB1309 QUANTIFICATION OF MINIMAL RESIDUAL DOSE ASSOCIATED WITH BIOLOGICAL THERAPEUTIC RESPONSE ANTI DRUG ANTI BODIES: ARE THEY ALL NEUTRALIZING?

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Background: The use of biological was associated to the capacity of inducing an immune response in patients that could neutralize the drug. The anti-body anti-drug (ADA) assay was a revolutionary tool to prevent treatment failure.

Objectives: The aim of this work was to asses if the presence of ADA in patients system is sufficient to preduct failure and indicates the switch of treatment.

Methods: We enrolled 69 patients treated with biotherapy between September 2017 and October 2018. 3 pathologies were considered: rheumatoid arthritis (RA) diagnosed by ACR/EULAR 2009 criteria, Spondyloarthritis (SPA) according to Assessment of Spondyloarthritis International Society (ASAS) And cohn’s disease (CD) classified upon the 2006 Montreal classification. We did search the presence of anti-body anti-drugs (ADA) and the residual dose for the following therapies: Etanercept (ETN), Infliximab (IFX), Adalimumab (Ada) or Rituximab (RTX).

Results: The mean age was 43.33 ± 11.4 year. The sexratio M/F was 1.57.

Regarding the RA: they were 13 patients. 10 had positive (ACPA) and seven positive (RF). All the patients had an initial treatment by conventional synthetic disease modifying antirheumatic drugs (csDMARDs) before moving to bDMARDs. 14 were in concomitant disease modifying therapy. The DAS28-ESR average was at 4.12 [2.67 à 5.79]. we found positive ADA in only one patient analysis. There were 8 responding versus five non-responding patients, according to the clinical and biological evaluation of disease activity.

28 patients were included in the SPA group: 13 with an spondylarthrosis. 14% had the HLAB 27. It was an active disease in 15 cases. ASDAS-CRP average was 4.87 ± 0.17 [4.7; 5]. The received biotherapy was IFX 50%, ETN 28.6% and Ada 21.4%. 10 patients had a positive ADA and 8 of them had a rate superior to 100 UI. 19 patients were considered as non-responding.

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Positive ADA was associated with therapy failure in all type of biotherapy (p=0.001). A low residual dose was associate to therapy failure only in the case of IFX (p=0.005).

Positive ADA was associated to a low rate of residual dose in the case of IFX and Ada. This association couldn’t be evaluated for RTX (none) and ETN (just one positive rate).

Conclusion: The ADA assay is a revolutionary tool allowing the evaluation of treatment response but it cannot be considered without the clinical assessment of patient. The evaluation residual dose should be concomitant to valorize and guide the therapeutic decision

REFERENCES

Disclosure of Interests: None declared

AB1310 PROSPECTIVE USE OF THE GLUCOCORTICOID TOXICITY INDEX (GTI) IN A COHORT OF VASCULITIS PATIENTS

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Background: The Charité Rh-GiOP is a prospective study of disease- and bone-related data from patients with chronic inflammatory diseases treated with glucocorticoids (GCs). The Glucocorticoid Toxicity Index app (GTI 2.0) measures changes in GC-associated morbidity. The GTI captures...