EFFECTIVENESS, SAFETY AND ADHERENCE OF BIOLOGICAL DRUGS FOR THE TREATMENT OF ARTHRITIS

Age of the patients was calculated in months from the beginning of treatment to the last dispensation register. We collected dispensation data from January 2007 to May 2019 to calculate adalimumab’s persistence until this date. The drug’s survival was calculated using the Kaplan–Meier method and the log rank test to compare survival in each of the pathologies. A significant difference was considered with a p value <0.05.

Results 125 patients started treatment with adalimumab between January 2007 and December 2016; 48 patients (38.4%) were diagnosed with rheumatoid arthritis, 43 (34.4%) with ankylosing spondylitis and 34 (27.2%) with psoriasis. 52.1% of all patients were naïve for biological drug treatments. 83.3%, 48.8% and 52.9% were women aged 57.6 ±43.8, 47.1±10.1 and 55.6 ±14.0 years in the rheumatoid arthritis, ankylosing spondylitis and psoriatic arthritis groups, respectively.

After analysing the data using the Kaplan–Meier method, we obtained an overall survival of adalimumab in each pathology, which was greatest in psoriatic arthritis with 59.9 months (95% CI 39.6 to 80.2), followed by 46.8 months in rheumatoid arthritis (95% CI 31.5 to 62.0) and 38.8 months (95% CI 25.1 to 52.4) in ankylosing spondylitis. When we compared the different pathologies by the log rank test, adalimumab’s persistence was statistically significant for rheumatoid arthritis and ankylosing spondylitis (p<0.00513, p<0.0025, respectively).

Conclusion and relevance Adalimumab is a biologic drug with proven therapeutic efficacy in the treatment of these pathologies. According to our data, adalimumab showed considerable persistence, which was greatest in psoriatic arthritis.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

**EFFECTIVENESS, SAFETY AND ADHERENCE OF BARicitINIB AND TOFACITINIB IN RHEUMATOID ARTHRITIS**

R Rodríguez Mauriz, C Seguí Solanes, N Almendros-Abad, A Sosa-Pons, N Rudi Sola. Hospital General De Granollers, Pharmacy Department, Granollers, Spain

Background and importance Janus kinases (JAK) inhibitors, baricitinib and tofacitinib, have emerged as an effective class in the treatment of rheumatoid arthritis (RA), which when administered orally offer an alternative to subcutaneous or intravenous biologic drugs, with efficacy and safety results comparable with those of biological therapies.

Aim and objectives To assess the effectiveness, safety and adherence to JAK inhibitors in patients with RA.

Material and methods A retrospective observational study was conducted in patients diagnosed with RA who received treatment with JAK inhibitors between 2017 and 2019 in a secondary hospital. Variables included were: sex, age, time since diagnosis, number of previous biologic treatments, dose and concomitant use of conventional disease modifying antirheumatic drugs. Clinical disease activity was assessed at months 0, 6 and 12 using the DAS28-ESR score.

Safety was evaluated according to adverse effects (AE). Adherence was calculated using the medication possession ratio (MPR), percentage of days’ supply obtained/refill interval or fixed interval, obtained from the pharmacy system.

Results 36 patients were included, 86% women (4 patients received both treatments). Age was 54 (SD 9) years and average time since diagnosis was 11 (SD 7) years. Average number of previous biologics was 2 (IQR 0–4). Treatment prescriptions were 50% tofacitinib (5 mg twice daily) and 50% baricitinib (4 mg four times a day except for two patients who had 2 mg four times a day). 53% of patients were taking concomitant methotrexate and 8% leflunomide.

From the 40 treatments assessed, 12 were stopped before 6 months and 3 before 12 months. The main reasons for discontinuation were: AE (40%) (headache, meninges, oedema, skin lesions), primary treatment failure (33%) and secondary treatment failure (20%). DAS28-ESR before JAK inhibitors was 4.9 (SD 0.7), at 6 months 3.4 (SD 1.1) (22% in remission) and 3.4 (SD 0.5) (0% in remission) at 12 months. DAS28-ESR was reduced by ≥1.2 points (moderate response) in 44% of patients at 12 months.

AE were observed in 44% of patients, most commonly: infections (14%), headache (11%) and gastrointestinal disorders (8%). The mean MPR was 92 (SD 0.1)% after 6 and 12 months. Two patients had an MPR < 80% at 6 months and 4 at 12 months.

Conclusion and relevance In our study, the percentage of adherence to JAK inhibitors was high. Despite no patients in remission at 12 months, almost half showed a moderate response to treatment. However, more than a third of patients reported AE.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

**BIOLOGICAL DRUGS FOR THE TREATMENT OF MODERATE-TO-SEVERE PLAQUE PSORIASIS: ANALYSIS ACCORDING TO THE MECHANISM OF ACTION**

Solazzi, M Guidi, A Abrate, Z Zinetti. ASl To4, Pharmacy, Cirie To, Italy. ASl To4, Pharmacy, Aosta To, Italy

Background and importance In the past years, many biological drugs have been approved for the treatment of moderate-to-severe plaque psoriasis.

Aim and objectives We aimed to describe the population of outpatients treated with biological drugs for moderate-to-severe plaque psoriasis according to the number and type of therapeutic shifts.

Material and methods We identified patients treated with a biological drug for moderate-to-severe plaque psoriasis (code ICD-9-CM 696.1 other psoriasis) from February 2017 to September 2020. Data were collected from drug refills by our pharmacy and electronically recorded. Biological drugs were considered according to the mechanism of action: anti-TNF-α (adalimumab, certolizumab, etanercept), anti-IL-17 (brodalumab, ixekizumab, secukinumab) and anti-IL-23 (guselkumab, risankizumab, tildrakizumab and ustekinumab). The therapeutic shift was intended as a change in the active substance, regardless of changes from an originator to its biosimilar/s, the pharmaceutical form (pen or syringe) or the dose.

Results From February 2017 to September 2020, 357 patients were treated with at least one biological drug for plaque
psoriasis. Median age was 50.7 years (range 5.9–91.7) and 221 (61.9%) patients were men. 282 patients (79%) were treated with only one biological drug: 75 patients with anti-TNF-α, 132 with anti-IL-17 and 75 with anti-IL-23. 65 patients (18.2%) were treated with two biological drugs in sequence (table 1).

Conclusion and relevance
More than 97% of patients were treated with only one (79%) or two (18.2%) biological drugs for moderate-to-severe plaque psoriasis, with a prevalence of anti-IL-17. Further investigation of the causes for the change from one to another biological drug is needed. These could include adverse events, ineffectiveness or other reasons.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest
No conflict of interest

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8 patients (2.2%) were treated with three biological drugs and 2 patients (0.6%) with four biological drugs. These patients used many different sequence combinations of these treatments.

Background and importance
Patients with immune mediated inflammatory diseases (IMID) have complex treatment. This is due to biological treatments, other chronic treatments, such as immunosuppressors, and the high load of treatments.

Aim and objectives
The aim of this study was to evaluate the knowledge of patients with IMID about their chronic medication and biological therapies (BT), as well as the sources of information used by the patients.

Material and methods
A transversal study of patients with IMID treated with BT was conducted in February 2020. A survey was designed that included the following variables: sex, age, biological treatment, route of administration, duration of treatment, number of chronic drugs, interest in medication from diagnosis, source of information about medication in the last year and interest in acquiring more information about the medication.

Results
60 patients were interviewed, 53.3% men, median age 53.4 years (IQR 36.1–70.7). The diagnoses were: inflammatory bowel disease (46.7%), rheumatoid arthritis (25%), ankylosing spondylitis (11.7%), psoriasis (10%) and psoriatic arthritis (6.7%). BT used were: infliximab (40%), adalimumab (10%), ustekinumab (10%), vedolizumab (10%), abatacept (5%), etanercept (5%), tocilizumab (5%) and others (15.1%). The main routes of administration were intravenous (61.7%), subcutaneous (33.3%) and oral (5%). Duration of treatment was 2 years (IQR 0.4–5.9). Median number of chronic treatments was 3 (IQR 2–6). 50.0% of patients reported being more interested in their medication since diagnosis. 76.7% had sought some type of information about their BT: internet (67.4%), health professionals (63.0%), environment (30.4%), news (17.4%) and other (8.7%). Chronic medication: internet (62.5%), health professionals (46.9%), environment (15.6%), news (15.6%) and other (6.2%). 90.0% preferred knowing why they take each medication. Median score for knowledge from diagnosis, source of information about medication in the last year and interest in acquiring more information about their BT and 45.0% about other medications.

Conclusion and relevance
Most patients considered that they were aware of the medications they were taking and had an increased interest from diagnosis. However, a high percentage sought information about their treatments, which indicates the high demand for information from patients. The internet was the most used source of information, which could be an important point towards pharmaceutical intervention.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest
No conflict of interest

4CPS-330

INDIVIDUALISING THERAPIES THROUGH PHARMACOKINETICS: ADALIMUMAB FOR INFLAMMATORY BOWEL DISEASE

D Rubio Calvo, M Herrera Exposito, JE Martínez De La Plata, CM Pinto Nieto*, MA Castro Vida. Agencia Pública Empresarial Hospital De Poniente, Pharmacy Department, El Ejido Almería, Spain

Background and importance
Biologic drugs are essential in the treatment of inflammatory bowel diseases (IBD) but it is necessary to individualise these therapies for optimal disease control. Pharmacokinetics have been shown to be useful for this aim.

Aim and objectives
To analyse the clinical impact of adalimumab adjustment through pharmacokinetics and clinical parameters in IBD control.

Material and methods
A longitudinal prospective study was conducted in a second level hospital in 2019, from June to December in patients with IBD treated with adalimumab that passed the induction phase. Data collected were sex, age and clinical parameters before and after treatment adjustment: plasma adalimumab levels and anti-adalimumab antibodies (ADAs) and previous adalimumab administration. Acute phase reactants (APR) were measured: C reactive protein (CRP), α-acid-glycoprotein (AGP) and faecal calprotectin. Overall patient status was obtained from the digital physician report; this parameter was reported as symptomatic or asymptomatic. We did one intervention per patient.

Interventions proposed were: treatment intensification (increasing dose and/or decreasing administration time), treatment deintensification (increasing administration time), drug...