Aim and objectives The objective of this study was to describe the current status of clinical trials (CT) for AD in our hospital pharmacy service and to analyse the investigational drugs.

Material and methods An observational descriptive retrospective study was carried out in a tertiary academic hospital. All active CT in the neuropsychology service from 1 January 2014 to 31 March 2019 were reviewed. Collected data were total number of CT; total number of included patients; demographic data; total number of CT classified by CT status (active/closed); clinical trial phase; therapeutic targets (reduction of amyloid plaques (AP)/precursor amyloid peptide (PAP) attack/inhibition of GLYT1 transporter/selective antagonism of 5-HT6 receptor/partial selective agonism of α_7 nicotinic receptor); administration route (oral/intravenous/subcutaneous); clinical trials with results; and type of result (positive/negative).

Results Twelve CT were analysed involving a total of 59 patients (mean 5 patients per clinical trial (rank 0–8)), 34 (57.6%) women with a mean age of 77.4 years (95% CI 71.5–84.7). Six (50.0%) CT were active; 3 (25.0%) CT were phase II trials and 9 (75.0%) were phase III trials. Therapeutic targets were reduction in AP 5 (41.7%), attack of PAP 3 (25.0%), inhibition of GLYT1 transporter 1 (8.3%), selective antagonism of 5-HT6 receptor 2 (16.7%), partial selective agonism of α_7 nicotinic receptor 1 (8.3%); route of administration oral 7 (58.3%), intravenous 1 (8.3%) or subcutaneous 4 (33.3%); and 3 (25.0%) CT had results, all of which were negative (3 (100%)).

Conclusion and relevance

- The highest number of active CT were phase III trials.
- Only 25% of CT had results and all were negative.
- Almost 60% of CT studied oral administration, which was patients' preference.
- There were a total of five therapeutic targets but more than 40% of the CT evaluated the reduction in APs.
- Based on these results, we should rethink the research on Alzheimer's disease before continuing to develop clinical trials with the same therapeutic target.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-141 EFFECTIVENESS OF IMMUNOTHERAPY IN SEVERE UNCONTROLLED ASTHMA

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10.1136/ejhp-pharm-2020-eahpconf.242

Background and importance It is estimated that asthma affects 4.9% of adults in Spain and 3.9% are classified as severe uncontrolled asthma (SUA). Omalizumab, mepolizumab, reslizumab and benralizumab are monoclonal antibodies indicated in the treatment of SUA in adults.

Aim and objectives To analyse the effectiveness and improvement in quality of life in patients with SUA treated with monoclonal antibodies in a second level hospital.

Material and methods A retrospective observational study was conducted of all patients with SUA who received monoclonal antibody therapy from August 2011 to September 2019. Age, gender and clinical data (treatment duration, ingestion of oral corticosteroids (OCS), asthma control test (ACT), presence of

exacerbations requiring OCS and hospitalisations related to asthma) were recorded before starting immunotherapy and at the last follow-up visit. Effectiveness was evaluated as a reduction in OCS, exacerbations and/or hospitalisations. ACT was used to evaluate improvement in quality of life, with a score of at least 20 considered good control of asthma.

Results Forty-eight patients were included, 70.8% (n=34) were women, mean age was 56 years (23–79), and 75% (n=36) were treated with omalizumab, 18.7% (n=9) with mepolizumab, 4.2% (n=2) with reslizumab and 2.1% (n=1) with benralizumab. Mean duration of treatment was 31, 9, 8 and 1 month, respectively. Effectiveness was not evaluated in three patients due to lack of information. Treatment was discontinued in 7 patients for inefficacy, 3 for tolerance, 1 for adherence and 1 for hospital referral. Three patients were switched from omalizumab to mepolizumab during the study. Before starting immunotherapy, 24.3% (n=10) of patients had ACT >20, and in the previous year 53.5% (n=23) took OCS, 83.7% (n=36) had exacerbations requiring OCS and 37.2% (n=16) required at least one hospitalisation due to an exacerbation. After treatment, the last follow-up results were 65.1% (n=28), 23.3% (n=10), 44.7% (n=17) and 5.3% (n=2), respectively.

Conclusion and relevance Immunotherapy was effective in most cases, reducing exacerbations and hospitalisations in SUA. It also allowed discontinuation of OCS therapy. The improvement in quality of life was proved with the increase in ACT score, despite its subjectivity.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-142 EFFECTIVENESS AND SAFETY OF ANTI-IL-5 BIOLOGIC AGENTS IN SEVERE EOSINOPHILIC ASTHMA

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10.1136/ejhp-pharm-2020-eahpconf.243

Background and importance Severe uncontrolled asthma is characterised by poor control despite treatment with inhaled glucocorticoids (IGC) and beta₂ adrenergic agonists (LABA) at high doses, and/or oral glucocorticoids (OGC). This type of asthma comprises a heterogeneous group of phenotypes treated with targeted therapy. Anti-IL-5 monoclonal antibodies (mepolizumab, reslizumab and benralizumab) are indicated in severe eosinophilic asthma (SEA).

Aim and objectives To assess the effectiveness and safety of anti-IL-5 biologic agents in a tertiary level hospital.

Material and methods This retrospective observational study included patients with SEA receiving treatment with anti-IL-5 agents from June 2017 to August 2019. Electronic clinical records were used to obtain sociodemographic variables (age, sex, concomitant medicines and previous biologicals), effectiveness (reduction in eosinophil blood levels, change in levels of exhaled nitric oxide (FeNO), forced expiratory volume in 1 s (FEV₁) and score in the asthma control test (ACT)) and safety (reported adverse effects).

Results Thirty-four patients were included, 67.6% (23) women, and mean age was 56.2 (41–69) years. Twenty patients received mepolizumab with an average duration of 40 weeks, 4 reslizumab for 27.7 weeks and 9 benralizumab for

19.9 weeks. A total of 56% of patients were diagnosed with SEA and 44% had a mixed eosinophilic-allergic phenotype. All patients received IGC+LABA at high doses. Thirteen patients were taking montelukast and two OGC at low doses; 53% (18) had received omalizumab previously.

Regarding effectiveness, mepolizumab decreased eosinophils from 840.6 (400–2012) to 143.75 (0–500) cells/ μ L, FeNO decreased to 17.14 (0–89) ppb, FEV₁ improved to 0.325 mL (0.12–0.65) and ACT improved to 6 points (2–9). With reslizumab, eosinophils decreased from 420 (100–1000) to 50 (0–100) cells/ μ L, FeNO decreased to 24.5 (0–35) ppb, FEV₁ improved to 0.4 mL (0.17–0.45) and ACT improved to 4 points (2–6). Benralizumab decreased eosinophils from 622.2 (0–1900) to 66.6 (0–600) cells/ μ L, FeNO decreased to 22.6 (0–43) ppb, FEV₁ improved to 0.36 mL (0.07–0.84) and ACT improved to 2.4 points (0–6). Two patients (10%) who received mepolizumab developed respiratory infection and one patient (5%) developed back pain. With benralizumab, two patients developed myalgias (22.2%) and one patient (11.1%) had diarrhoea.

Conclusion and relevance In conclusion, anti-IL-5 therapy was effective and safe. Adequate monitoring is needed to optimise treatment.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-143

TREATMENT OF ASTHMA AND CHRONIC OBSTRUCTION PULMONARY DISEASE: ARE OUR HOSPITAL NURSES AND PHYSICIANS READY TO TREAT AND EDUCATE INPATIENTS?

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10.1136/ejhp-pharm-2020-eahpconf.244

Background and importance In the treatment of asthma/chronic obstruction pulmonary disease (COPD), misuse of inhalation devices is common, with a higher risk of treatment inefficacy, side effects or acute exacerbations, leading to more hospitalisations. In hospital, nurses and doctors are expected to (re) assess patients' knowledge/ability to use their treatments for those hospitalised with severe asthma/COPD, particularly among the elderly population.

Aim and objectives Before implementing a procedure of patient assessment at admission, we conducted a hospital wide survey to appraise knowledge and current practices of nurses and doctors.

Material and methods We conducted an observational study by interviewing nurses and doctors from 12 care units (adults/geriatric, without respiratory specialisation) in August 2019. Two distinct questionnaires based on a literature review were developed by a multidisciplinary group, including three similar parts: knowledge about physiopathology and treatments (1); practices and self-confidence to educate patients (2); and professional training needs (3). Nurses were individually interviewed by a pharmacy resident while doctors answered an individual online questionnaire.

Results We interviewed 37 nurses, and 14/27 practitioners/interns responded to the questionnaire. The main results in part 1 were that 51.4% of nurses knew the characteristic symptoms of asthma, 45.9% considered budesonide a

bronchodilator and 14.3% of doctors knew that there were non-validated combinations of nebulisation drugs. In part 2, 48.6% of nurses and 14.3% of doctors declared that a patient's assessment is made at admission, partly due to the absence of a procedure and a lack of time, respectively; 60% of nurses told patients to rinse their mouth after inhalation of corticoids. In part 3, 78% of nurses were quite/totally confident about inhaler device use compared with 35.7% of doctors; doctors considered general practitioners and nurses the most appropriate professionals for patient education. We found that 84.1% of nurses and 92.9% of doctors were interested in specific training.

Conclusion and relevance The results showed a lack of knowledge of nurses/prescribers about some aspects of asthma/COPD, despite nurses' self-confidence. Among our patients, few were evaluated at admission on their ability to use their devices correctly, with the risk that their treatments may not be optimised. To improve knowledge of professionals and harmonise our practices, we aim to offer training and formalise a procedure for eligible patient evaluation/education at admission, thus ensuring better care.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-144

SAFETY AND EFFECTIVENESS OF REDUCED DOSE OMALIZUMAB FOR CHRONIC IDIOPATHIC URTICARIA

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10.1136/ejhp-pharm-2020-eahpconf.245

Background and importance Omalizumab, a monoclonal antibody that selectively binds to human immunoglobulin E, has been approved by the FDA for the treatment of chronic idiopathic urticaria (CIU) at two different dosing: 150 mg (reduced dose) and 300 mg monthly.

Aim and objectives To determine the safety and effectiveness of omalizumab in both doses for the treatment of CIU in our centre.

Material and methods This was an observational, descriptive, retrospective study of omalizumab prescribed for adult patients with CIU from January 2015 to September 2019 in a third level hospital. Variables collected were sex, age, service (allergy or dermatology), previous treatments, initial dose, dose change, clinical variable urticaria activity score 7 (UAS7), suspension of treatment and adverse reactions.

Results Fifty-two patients (67.31% women) with a median age of 50.5 years (range 23–75) were included: 65.38% (n=34) were from allergy and 34.62% from dermatology. All patients had previously received antihistamines, montelukast and ciclosporin. Only three patients started with a monthly dose of omalizumab of 150 mg while the rest (94.23% (n=49)) started with 300 mg monthly. However, in the last group of patients, 44.90% (n=22) required a dose change: in 68.18% (n=15) of patients, the dose was decreased to 150 mg monthly because of a good response and in the rest (31.82% (n=7)) the dose was intensified due to lack of disease control.

UAS7 was collected before and during treatment with omalizumab in only 69.23% of patients (n=36). Median UAS7 before treatment with omalizumab was 29.5 (range 2–42). During treatment, UAS7 was 0 (range 0–32) with both doses of omalizumab.