subsequent therapeutic optimisation (dose escalation, interval reduction or therapeutic switch).

Results 58 patients remained in the first line of treatment. 12 patients needed one switch and 1 patient underwent 2 switches. The average number of drugs administered per patient was 1.2.

The overall mean times, in weeks of treatment, were 187 for adalimumab, 94 for infliximab, and 58 for vedolizumab. Patients who remained on the same drug showed a mean treatment time of 193 weeks for adalimumab and 106 for infliximab.

Regarding PNR, it only occurred with infliximab, in 8.1% (3/37) of patients, after an average of 35 weeks of treatment.

20 patients (28%) had undergone 23 therapeutic optimisations by SLR, distributed as follows: 6 increased doses, 2 reduced time interval and 15 therapeutic switches. The time to SLR was, in weeks, 189.5 for adalimumab, 53.3 for infliximab and 18 for vedolizumab.

Conclusion and relevance TDM allowed therapeutic optimisation of biological agents, enabling the maintenance of patients on the selected regimen for more time, and an early switch in PNR.

Serum determination of drug concentrations and antidrug antibody levels may be a good strategy for maintenance and/or optimisation of therapy.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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Conflict of interest No conflict of interest

4CPS-131 SWITCHING AND DISCONTINUATION OF DISEASE-MODIFYING TREATMENTS IN MULTIPLE SCLEROSIS PATIENTS: EXPERIENCE IN A UNIVERSITY HOSPITAL

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Background and importance Currently, there are many approved disease-modifying treatments (DMTs) for the management of multiple sclerosis (MS) with variable potencies (first-line and second-line therapies), different schedules, mechanism of action, route of administration and side effect profile. None of them are curative. Modification between first-line DMTs or switching to second-line are proposed when the disease progresses, and no universal guidelines exist for switching therapies.

Aim and objectives To describe the reasons that brought about treatment modification in routine clinical practice with reference to: switch, temporary interruption or permanent discontinuation.

Material and methods During the retrospective study period (December 2019–December 2020) patients with relapsing MS were analysed.

Collected data were: age, sex, DMT before and after switch, reason for treatment modification, duration of initial therapy, number of changes.

Results Of 200 analysed patients, 106 had treatment modification, 69 were women, mean (SD) age was 39.9 (9.47) years.

82 patients had received one previous treatment with median duration 58 months, and 24 received at least two treatments.

8 patients had temporary interruptions (4 for pregnancy and 4 for other personal reasons) and none had permanent discontinuation. The main drugs used before the modification were the *interferons* IFNb-1a (50%) and IFN-1b (38%), and after the modification teriflunomide (33%) and natalizumab (44%). Reasons for treatment switch were unacceptable breakthrough disease activity (60 patients), treatment intolerance (35 patients) and JC virus (JCV) activation with progressive multifocal leukoencephalopathy risk (11 patients).

Of the patients with a suboptimal response, unfortunately 9 patients with duration of treatment more than 20 years converted to secondary progressive MS with permanent disability.

Regarding treatment intolerance, the most remarkable reasons were IFN-related flu-like symptoms, depression and injection site reactions.

Conclusion and relevance Modification between first-line DMT or escalation to higher potency therapies was a common occurrence during our study. Most patients were treated with first-line drugs before and after the modifications.

Lack of efficacy remains the main driving force behind switching. These results confirmed that some patients can experience disease activity despite injectable or oral DMTs, which necessitates escalating to a more potent treatment for preventing worsening of disability. Determining which DMT is best for which patient and when to switch remains a major challenge, and the patient's personal preferences should be considered.

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4CPS-133 ANALYSIS AND EVALUATION OF PHARMACEUTICAL INTERVENTIONS PERFORMED IN THE EMERGENCY DEPARTMENT

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Background and importance The emergency department (ED) has been described as a dynamic and complex environment vulnerable to medical errors.

The clinical pharmacist (CP) has proven to be a key part of the multidisciplinary team for improving the quality and safety of patient care.

Services provided by pharmacists in the ED include traditional clinical pharmacy services, responding to medical emergencies, providing consultations on medication issues and identifying drug-related problems.

Aim and objectives To analyse and evaluate the CP's interventions in the ED.

Material and methods A descriptive prospective study of the CP's interventions performed in a 2-month-work rotation period in the ED was performed. The study was conducted in a 400-bed hospital that serves a population of 250 000 inhabitants.

The following variables were collected: type of pharmaceutical intervention, pathology associated with IP, proactive intervention (yes/no) and acceptance of the intervention (yes/no).