had to reduce the dose, of whom 28.57% had to reduce to the minimum dose of 75 mg while the rest remained on the 125 mg dose. The main cause of dose reduction for both was neutropenia (50% for ribociclib and 72.22% for palbociclib). The next cause was liver toxicity (37.55%) from ribociclib and gastrointestinal upset (16.67%) from palbociclib.

Conclusion and relevance Comparing effectiveness, a greater PFS was found for ribociclib compared with palbociclib (2.09 months); there was a higher percentage of patients with progression after treatment with palbociclib (45.83% vs 16.67%). Regarding toxicity, ribociclib had a higher toxicity profile than palbociclib. Both required dose adjustment, greater for palbociclib, the main cause in both being neutropenia.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-162 METHOTREXATE INDUCED MYELITIS IN A CAUCASIAN GIRL WITH LYMPHOBLASTIC LYMPHOMA AND PHARMACOGENETIC STUDY: A CASE REPORT

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Background and importance Methotrexate (MTX) is widely used in paediatric chemotherapy treatment and is effective. However, it presents with significant toxicity. Myelopathy is a rare but serious complication, usually related to mechanical damage caused by multiple lumbar punctures and the administration of drugs by this route. The main symptoms are loss of sensitivity, alteration of motor neurons, root pain and sphincter incontinence.

Aim and objectives We present a clinical case of a Caucasian girl with precursor B cell lymphoblastic lymphoma, stage IV, that affected the CNS type 3. She presented with neurotoxicity after administration of intrathecal MTX. She received treatment under the EURO-LB02 protocol.

Material and methods After seven doses of intrathecal triple (TIT) the patient began to experience distal tremor with numbness in the feet and slight ataxia. Gradually, the numbness increased and she developed areflexic paraparesis with static and kinetic ataxia that prevented her from walking. There was no cognitive impairment. MRI showed areas of leucoencephalopathy and homogeneous hyperintensity in the posterior segment from T1 to T12, suggesting dorsal myelitis. Folic acid and vitamin B12 levels were normal. Lymphoblastic invasion of the CNS was eradicated. To treat myelitis, she received methylprednisolone, dextromethorphan, s-adenosylmethionine, folinate, cyanocobalamin and intensive rehabilitation. Due to the patient's condition, we analysed 22 single nucleotide polymorphisms (SNPs) associated with the MTX metabolic pathway by TaqMan real time PCR.

Results 10 altered SNPs were found, mainly in genes encoding transport proteins (ABCB1 and ABCG2) and enzymes in the folate pathway (MTHFR) that could explain the toxicity manifested. However, there was low level evidence to support it. During subsequent cycles of chemotherapy, MTX was discontinued from TIT and intravenous MTX was gradually titrated to full doses. Currently, the patient is in the reinduction phase and has shown partial recovery from myelitis. She was rescued with leucovorin after intravenous MTX and levels of MTX were always within the normal range without notable toxicity.

Conclusion and relevance MTX may cause spinal cord dysfunction in children, especially when the intrathecal route is used. SNPs in enzymes involved in pharmacokinetics and pharmacodynamics may be the cause. However, more studies are needed to confirm these findings and translate them into information applicable to clinical practice.

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5PSQ-163 INCIDENCE OF NEUTROPENIA AND EFFECTIVENESS OF PALBOCICLIB IN CLINICAL PRACTICE IN METASTATIC BREAST CANCER AFTER 4 YEARS OF USE

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Background and importance The inhibitor of cyclin dependent kinases 4 and 6, palbociclib, was a major advance in the treatment of metastatic breast cancer.

Aim and objectives To describe the effectiveness and incidence of neutropenia with palbociclib in clinical practice.

Material and methods A retrospective study was conducted in patients with metastatic or locally advanced breast cancer treated with palbociclib on any line in a tertiary hospital between July 2016 and August 2020. Demographic variables were collected: start and end date of the drug, concomitant hormonal treatment and treatment with denosumab. The presence of neutropenia was assessed before the start, on day 15 of the first cycle and with each reduction.

Results 58 patients were included with a median age at the start of palbociclib treatment of 59.0 years (33–87); the median cycle was 9 (2–34). 50% were on concomitant treatment with fulvestrant, 43.1% with letrozole, 3.4% with goserelin, 1.7% with anastrozole and 1.7% with exemestane. 44.8% of patients were treated with denosumab for bone metastases. The average neutrophil count was reduced by 52.9% from the beginning to the middle of the first cycle, with neutropenia appearing in 69.0% of patients (1.7% grade 4; 22.4% grade 3; 24.2% grade 2, 20.7% grade 1). 44.8% (26) had a first level reduction to 100 mg, with neutropenia appearing in 92.3% of these (15.4% grade 4; 61.5% grade 3; 15.4% grade 2). 46.2% of the previous patients (12) required a further reduction to 75 mg, with neutropenia appearing in 91.6% (58.3% grade 3; 25% grade 2; 8.3% grade 1). The average progression free survival was 17.6 (±1.8) months. Overall survival averaged 25.7 (±1.3) months. Patients with dose reductions were not more likely to progress (p=0.196). 51.7% received palbociclib as firstline, 32.8% as secondline and 15.5% as successive lines of treatment.

Conclusion and relevance Haematological toxicity in the form of neutropenia was frequent, from the first cycle, and remained despite successive dose reductions; reductions were needed in almost half of the patients. However, these dose