4CPS-070 STUDY OF CARDIOVASCULAR TOXICITY ASSOCIATED WITH IBRUTINIB TREATMENT

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Background and importance Ibrutinib treatment has been associated with the development of unwanted cardiovascular (CV) and bleeding events, which may lead to the loss of a line of treatment in patients with so few therapeutic options.
Aim and objectives The objective of this study was to evaluate the rate of events related to cardiovascular toxicity during treatment with ibrutinib.
Material and methods Observational, retrospective study carried out between July 2015 and September 2021, which included all patients treated with ibrutinib. Clinical and demographic variables: age at the start of treatment, sex, diagnosis, previous therapeutic lines, duration of treatment, death, dose reduction and suspension of treatment. Previous CV risk factors were recorded: diabetes mellitus (DM), arterial hypertension (AHT), dyslipidaemia; and the underlying CV pathologies: heart failure (HF), atrial fibrillation (AF), ventricular tachyarrhythmia (VT). The appearance of new CV events related to ibrutinib treatment was recorded: AF, HF, VT, AHT and bleeding events. The rates of their appearance were calculated, excluding patients who had been treated for a period of less than 6 months.
Results A total of 66 patients were included (median age 72.7 (47–90) years, 68.2% men). 75.8% suffered from chronic lymphocytic leukaemia, 10.6% from mantle cell leukaemia, 12.1% from Waldenstrom macroglobulinemia and non-Hodgkin lymphoma as off-label use. 34.8% first-line treatment, 33.3% second-line, 15.1% third-line, 10.6% fourth-line, 6.1% fifth and subsequent lines. The mean duration of treatment was 22.6 [7.3–80.2] months. 63.6% keep the treatment going, 21.2% progressed and 15.5% died during treatment. 37.9% (25) did not have any risk factor at the beginning of the treatment, 22.7% (15) had two basic risk factors, and 10.6% (7) had three risk factors. 9.1% (6) had underlying CV pathology. During treatment, 34.8% (23) of patients developed some CV episode associated with ibrutinib use: 13.6% (9) AHT, 12.1% (8) AF, 7.6% (5) bleeding events, 1.5% (1) HF and 1.5% (1) VT. The dose was reduced in 2 patients and ibrutinib was suspended in 2 patients (3%).
Conclusion and relevance This study shows that 65% of patients do not develop any type of cardiovascular toxicity. Only a small percentage of patients need a dose reduction or suspension of treatment due to cardiovascular adverse events, requiring a multidisciplinary approach in the proper management of the drug.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-073 DESENSITISATION TO IBRUTINIB IN A PATIENT WITH SERIOUS LATE REACTION: A CASE REPORT

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Background and importance The use of a desensitisation protocol (DP) allows tolerance to drugs to which a hypersensitivity reaction has occurred, allowing treatment options which in some cases are the only ones available.
Aim and objectives Describe the use of a DP for ibrutinib in a patient with limited treatment options.
Material and methods 67-year-old woman with stage IV chronic lymphatic leukemia, not a candidate for transplantation, with a history of relapse to previous treatments. After 14 months of treatment with ibrutinib with good tolerance, a serious late reaction arose with a generalised purpuric rash of several days of evolution, and arthromyalgia that required hospitalisation and drug discontinuation, with subsequent clinical resolution.

Intradermal test for differential diagnosis of allergy versus late cutaneous adverse reaction was not conclusive for sensitisation to ibrutinib and a DP was proposed based on Phadke *et al*.[1]
Results Ibrutinib capsules were dispersed in purified water. A DP was performed with both hospital and home administration. Daily doses were administered 1 hour apart (table 1).

Abstract 4CPS-073 Table 1

No.	Administration	Dispensed dose	Interval (min)
1	Hospital	0.042 mg/0.42 mL (0.1 mg/mL)	60
2	Hospital	0.084 mg/0.84 mL	60
3	Hospital	0.168 mg/1.68 mL	60
4	Hospital	0.336 mg/3.36 mL	60
5	Home	0.630 mg/6.30 mL, 5 doses	24 hours (5 days)
6	Hospital	0.672 mg/0.67 mL (1 mg/mL)	60
7	Hospital	1.344 mg/1.35 mL	60
8	Hospital	2.688 mg/2.70 mL	60
9	Hospital	5.376 mg/5.40 mL	60
10	Home	10.710 mg/1.70 mL (10 mg/mL), 5 doses	24 hours (5 days)
11	Hospital	10.750 mg/1.75 mL	60
12	Hospital	21.504 mg/2.15 mL	60
13	Hospital	43 mg/4.3 mL	60
14	Hospital	86 mg/8.6 mL	60
15	Home	140 mg (1 capsule)	24 hours (5 days)
16	Hospital	280 mg (2 capsules)	60
17	Home	280 mg (2 capsules), 5 days	24 hours (5 days)
18	Hospital	420 mg (3 capsules)	60

The patient returned to the usual treatment with good tolerance.
Conclusion and relevance The DP allowed continuation with ibrutinib, with safety and good tolerance, without loss of this therapeutic option.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Phadke NA, *et al*. Immediate reaction to ibrutinib amenable to oral desensitization. *J Oncol Pharm Pract* 2021;**27**(7):1802–1805.

Conflict of interest No conflict of interest