4CPS-073
ATC 2

DESENSITISATION TO IBRUTINIB IN A PATIENT WITH SERIOUS LATE REACTION: A CASE REPORT

R. TAMAYO BERMEJO, L. YUNQUERA ROMERO, M. NIETO GUINDO, I. MUÑOZ CASTILLO.

REGIONAL UNIVERSITY HOSPITAL OF MÁLAGA, PHARMACY DEPARTMENT, MÁLAGA, SPAIN.

@rociotamayo_

Background

The use of a desensitization protocol allows tolerance to drugs to which a hypersensitivity reaction has occurred, allowing treatment options which in some cases are the only ones available.

Objectives

Describe the use of a DP for ibrutinib in a patient with limited treatment options.

Material and methods

67-year-old woman diagnosed with stage IV chronic lymphatic leukemia, not candidate for transplantation with a history of relapse to previous treatments with Fludarabine-Cyclophosphamide and R-Bendamustine.

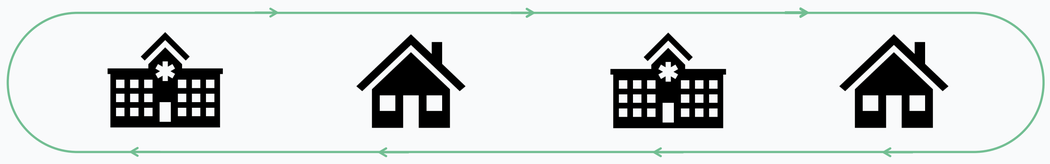
After 14-months treatment with Ibrutinib with good tolerance, a serious late reaction arose with a generalized purpuric rash of several days of evolution, accompanied by arthromyalgia that required hospitalization and forced drug discontinuation, with subsequent clinical resolution.

As an allergic history of interest, the patient had developed a cytokine-release syndrome to immunoglobulin administration, previously.

Intradermal test for differential diagnosis of allergy vs. late cutaneous adverse reaction was not conclusive for sensitization to ibrutinib and a desensitization was proposed based on Phadke NA et al.

Results

Desensitization protocol was performed with both hospital and home administration:



The doses administered at the hospital were prepared in syringes with the individual doses at the Pharmacy Department to be administered that same day in the Day Hospital of Allergy Department.

To prepare the doses administered at home, information was given to the patient on how to prepare an extemporaneous preparation and the volume to be administered each day. A bottle with the volume of purified water where to disperse the capsule each day was given.

- Ibrutinib capsules were dispersed in purified water.
- Daily doses were administered 1 hour apart.

DOSE Nº	ADMINISTRATION	DISPENSED DOSE	ACCUMULATED DOSE	INTERVAL
1	Hospital	0.042 mg 0,42 ml (0,1mg/ml)	0.042 mg	60 min
2		0.084 mg 0,84ml (0,1mg/ml)	0.126 mg	60 min
3		0.168 mg 1,68 ml (0,1mg/ml)	0.294 mg	60 min
4		0.336 mg 3,36 ml (0,1mg/ml)	0.63 mg	60 min
5	Home	0.63 mg 3,36 ml (0,1mg/ml) 5 doses	0.63 mg	24 hours (5 days)
6	Hospital	0.672 mg 0,67 ml (1mg/ml)	1.302 mg	60 min
7		1.344 mg 1,35 ml (1mg/ml)	2.646 mg	60 min
8		2.688 mg 2,7 ml (1mg/ml)	5.334 mg	60 min
9		5.376 mg 5,4 ml (1mg/ml)	10.71 mg	60 min
10	Home	10.71 mg 1,7 ml (10 mg/ml) 5 doses	10.71 mg	24 hours (5 days)
11	Hospital	10.75 mg 1,75 ml (10 mg/ml)	21.46 mg	60 min
12		21.504 mg 2,15 ml (10 mg/ml)	42.964 mg	60 min
13		43 mg 4,3 ml (10 mg/ml)	85.964 mg	60 min
14		86 mg 8,6 ml (10 mg/ml)	171.964 mg	60 min
15	Home	140 mg (1 capsule)	140 mg	24 hours (5 days)
16	Hospital	280 mg (2 capsules)	280 mg	60 min
17	Home	280 mg (2 capsules/day) 5 days	280 mg	24 hours (5 days)
18	Hospital	420 mg (3 capsules)	420 mg	60 min

Conclusion

The patient returned to the usual treatment with safety and good tolerance, without losing this therapeutic option.