

WHAT IS THE ADDITIONNAL VALUE OF PHARMACEUTICAL INTERVENTIONS BEFORE [¹²³I]-METAIODOBENZYLGUANIDINE SCINTIGRAPHY?



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INTRODUCTION & OBJECTIVES

Background :

[¹²³I]-metaiodobenzylguanidine (**mIBG**) scintigraphy is a tool to assess the **sympathetic innervation**. It is especially indicated in our unit to differentiate atypical Parkinson syndromes.

Many drugs are known to interfere with this radiopharmaceutical which can lead to false results¹.

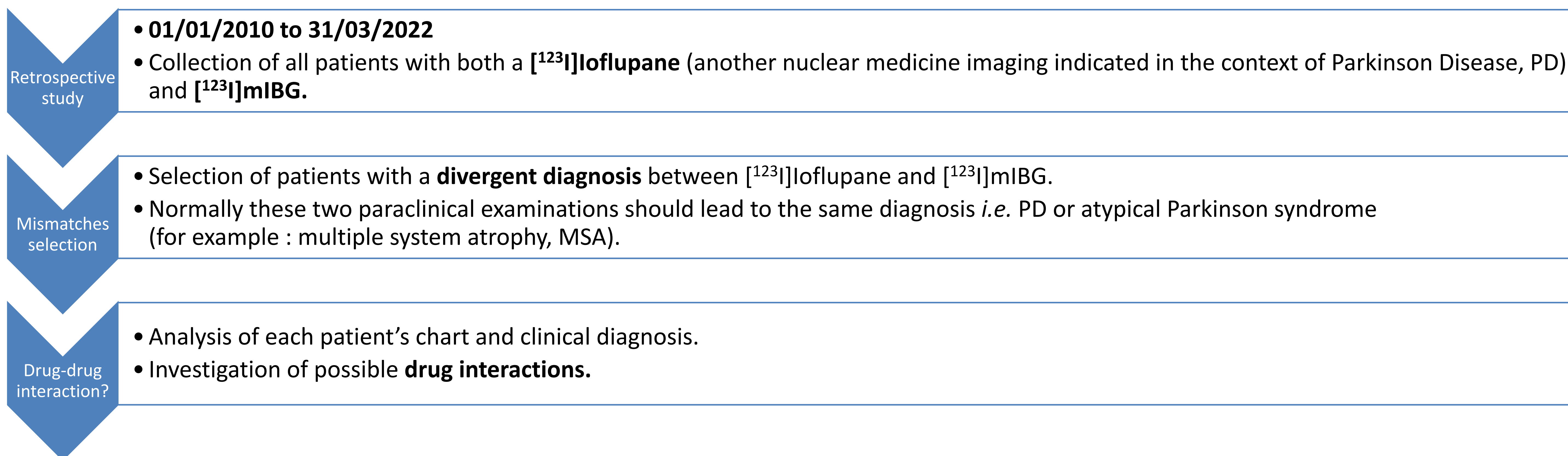


Aim :

This study was assessed the **potential added value of stopping interfering drugs** with [¹²³I]-mIBG in a retrospective study before the recent introduction of **pharmaceutical interviews** in a nuclear medicine department.

(1) Bombardieri E et al. 131I/123I-metaiodobenzylguanidine (mIBG) scintigraphy: procedure guidelines for tumour imaging. Eur J Nucl Med Mol Imaging. 2010 Dec;37(12):2436-46.

MATERIAL & METHODS



RESULTS

Retrospective study

42 patients

- [¹²³I]loflupane +
- [¹²³I]mIBG

13 patients (31%)

- **Mismatch** between the 2 imaging techniques

2 patients

- **Drug-drug interaction** could explain the divergent medical interpretation

Analysis of the 2 patients

	Patient n°1	Patient n°2
Paraclinical examinations	[¹²³ I]mIBG : normal [¹²³ I]loflupane: √ → in favor of MSA?	[¹²³ I]mIBG : normal [¹²³ I]loflupane: √ → in favor of MSA?
Clinical diagnosis	→ in favor of PD?	→ PD of mixed origin?
Potential drug interaction	Amlodipine	Lercanidipine

Would **calcium channel blockers** disrupt [¹²³I]-mIBG cardiac imaging by increasing sympathetic activity²?

(2) Stefanelli et al. Pharmacological interference with 123I-metaiodobenzylguanidine: A limitation to developing cardiac innervation imaging in clinical practice? European Review for Medical and Pharmacological Sciences. 2013 May; 17(10):1326-33

DISCUSSION & CONCLUSION

