HEAD TREMOR ASSOCIATED WITH UNILATERAL REST TREMOR: ET, PD OR OTHER?

Manuela Mancini¹, M. Morelli¹, T. Garcea¹, R. Nisticò², G. Arabia¹, G. Barbagallo¹, A. Lupo¹, L.I. Manfredini¹, V. Vescio², M.Salsone², F. Novellino², G. Nicoletti², A. Quattrone^{1,2}

¹Institute of Neurology, Department of Medical and Surgical Sciences - Magna Graecia University – Catanzaro

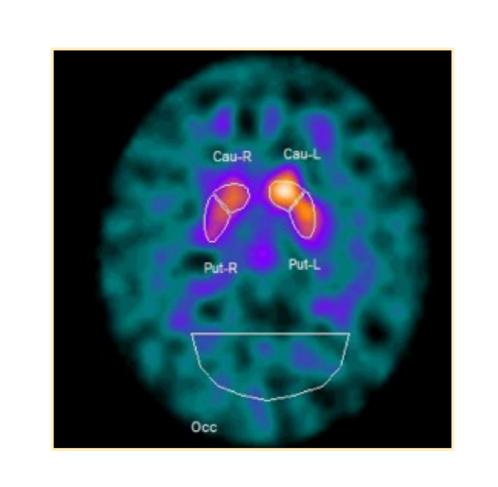
²Neuroimaging Research Unit, Institute of Molecular Bioimaging and Physiology - National Research Council - Catanzaro

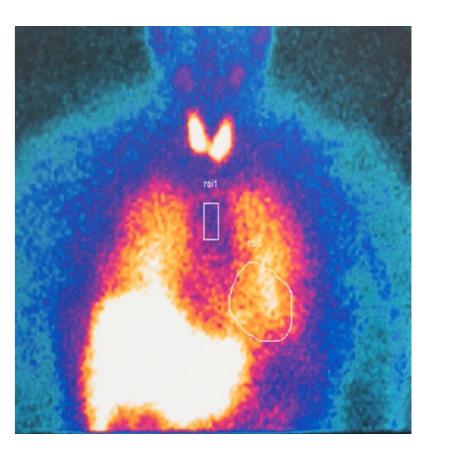
INTRODUCTION

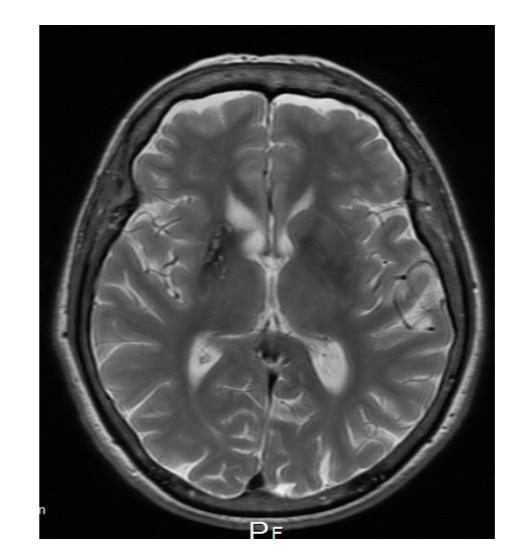
Tremor is defined as a movement disorder characterized by oscillatory, often rhythmic movement resulting from alternating contraction of muscles (1). Essential tremor (ET) and Parkinson Disease (PD) represent the two most common tremor disorders in adults. ET is defined by the presence of head tremor whereas PD is characterized by rest tremor (2).

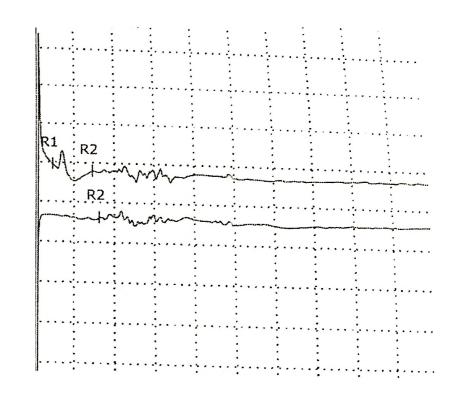
CASE REPORT

Here we describe a patient with head tremor associated with rest left hand tremor. A 78-years-old woman, presented with a 4-years history of sudden onset and non progressive tremor in the left hand. Her aunt on the mother's side, suffered from ET. In her past medical history she presented risk factors for cardiovascular diseases that are not controlled and two episodes of TIA. Her neurological examination showed head tremor, rest and postural left hand-tremor with bradykinesia in the same side. The blink reflex recovery cycle explained a normal R2 recovery, bilaterally. Brain 3T MRI examination underlined vascular lesions in the right caudate and putamen nuclei. DAT-SCAN showed reduced uptake in right basal ganglia and MIBG scintigraphy evidenced normal uptake.









DISCUSSION

We report a case of a patient that presented clinical characteristics both ET and PD. However rest tremor can be seen in ET and head tremor has been occasionally described in PD (2). Recent study demonstrate that the recovery cycle of the blink reflex distinguished patients with PD from those with ET with associated resting tremor with a high accuracy (100%)(3). In this case the recording of recovery cycle of the patient is normal and therefore excluded the diagnosis of PD. In addition, MRI of the patient explain vascular lesions in the right basal ganglia.

CONCLUSION

In conclusion, clinically the patient seem to be affected by ET with associated rest tremor but the results of diagnostic investigations make us a diagnostic hypothesis of ET with vascular lesions that lead parkinsonian signs.

REFERENCES

- 1. Louis E.D. et. Al. Essential Tremor. Lancet Neurol. 2005; 4:100-10.
- 2. Thenganatt M.A., Jankovic J. The relationship between essential tremor and Parkinson's Disease. Parkinsonism and Related Disord. 2014; 20:153-156.
- 3. Nisticò R., Salsone M, Vescio B. et al. Blink reflex recovery cycle distinguishes essential tremor with resting tremor from de novo Parkinson Disease. An exploratory study. Park. Relat. Disors. 2014; 20:153-156



