



## Correspondence

**Reply to: Double trouble progressive external ophthalmoplegia and Huntington's disease***Keywords:*

Mitochondrial DNA  
Huntingtin  
CAG-repeat expansion  
Trinucleotide expansion disorder  
tRNA

We read the letter by Finsterer and Zarrouk-Mahjoubb [1] about our paper "A novel mitochondrial tRNA(Ala) gene variant causes chronic progressive external ophthalmoplegia in a patient with Huntington disease" [2].

We thank the colleagues for manifesting interest in our paper and expressing their opinion.

However, we do not agree on the considerations in respect to the clinical condition affecting our patient.

From a clinical point of view, the patient presents a myopathic picture characterized by bilateral ophthalmoparesis, dysphagia, dysphonia and mild proximal limb weakness. It then associates numbness and bilateral deafness. About 10 years later, extrapyramidal signs such as abnormal involuntary movements involving the head and limbs, imbalance and cognitive decline appeared.

It is well known that late-onset Huntington disease usually present with a 60–79 year onset range and a CAG expansion size ranging from 38 to 44 repeats, or even less. These patients develop chorea and motor, cognitive and psychiatric symptoms [3,4,5].

Given the occurrence of a 38 CAG pathological expansion in the *HTT* gene in our 70-year-old patient, all clinical symptoms cannot

be attributed with certainty only to mitochondrial mutation and a "double trouble", a concomitant action between the two clinical conditions, which is what we have described in the paper, remains the more likely explanation.

Yours sincerely,

**References**

- [1] J. Finsterer, S. Zarrouk-Mahjoubb, Double trouble progressive external ophthalmoplegia and Huntington's disease, *Mol. Genet. Metab. Rep.* 7 (2016) 77.
- [2] M. Filosto, G. Lanzi, C. Nesti, V. Vielmi, E. Marchina, A. Galvagni, S. Giliani, F.M. Santorelli, A. Padovani, A novel mitochondrial tRNA(Ala) gene variant causes chronic progressive external ophthalmoplegia in a patient with Huntington disease, *Mol. Genet. Metab. Rep.* 6 (2016) 70–73.
- [3] P.J. Garcia-Ruiz, J. Garcia-Caldentey, C. Feliz, J. Del Val, A. Herranz, J.C. Martínez-Castrillo, Late onset Huntington's disease with 29 CAG repeat expansion, *J. Neurol. Sci.* 363 (2016) 114–115.
- [4] M.R. Cornejo-Olivas, M.A. Inca-Martinez, K. Espinoza-Huertas, D. Veliz-Otani, M.R. Velit-Salazar, V. Marca, O. Ortega, I.F. Cornejo-Herrera, S. Lindo-Samanamud, P. Mora-Alferez, P. Mazzetti, Clinical and molecular features of late onset Huntington disease in a Peruvian cohort, *J. Huntingtons Dis.* 4 (2015) 99–105.
- [5] H. Lipe, T. Bird, Late Onset Huntington Disease: clinical and genetic characteristics of 34 cases, *J. Neuro Sci* 276 (2009) 159–162.

Massimiliano Filosto

*Clinical Neurology, Section for Neuromuscular Diseases and Neuropathies,  
University Hospital "Spedali Civili", Brescia, Italy*

Filippo M. Santorelli

*Unit of Molecular Medicine, IRCCS Stella Maris, Pisa, Italy*

6 May 2016