Ottava Giornata della Ricerca della Svizzera Italiana
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Modulo per la sottomissione abstract ricerca di LABORATORIO

Titolo (massimo **15 parole**)

Phosphorylated and oligomeric alpha-synuclein in skin nerve fibers discriminate Parkinson Disease from Atypical Parkinsonism

Autori (cognome e iniziali, es: Grassi L.)

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Testo (massimo **250 parole**, preferibilmente in italiano (accettato anche in inglese), suddiviso in Introduzione, ***Metodi***, ***Risultati***, ***Conclusioni*** e ***Finanziamento***

Atypical parkinsonism (AP) refers to a variety of neurological disorders characterized by parkinsonian symptoms often non responding to symptomatic therapy. Like Parkinson Disease (PD), AP is associated to intraneuronal protein accumulation and, based on histopathological analysis, is possible to distinguish synucleinopathies (alpha-synuclein deposits) and tauopathies (tau deposits).
Clinical differentiation between PD and AP is difficult even for expert neurologists. Here, we evaluated the diagnostic utility of histological analysis of cutaneous peripheral nerves in skin biopsies to differentiate PD and AP.
As part of “NSIPD001 study” started at Neurocentro della Svizzera Italiana, Lugano, in 2015, demographic, clinical data, and skin biopsies from distal leg, thigh and cervical area were collected from 19 PD, 14 age-matched healthy controls and 13 AP. We evaluated the presence of phosphorylated and oligomeric alpha-synuclein in cutaneous nerve fibers by immunofluorescence, and quantification of intraepidermal nerve fiber density (IENFD) as a measure of neurodegeneration.
Pathologic alpha-synuclein was detected in PD and AP with synucleinophathy mainly at cervical site. Oligomeric alpha-synuclein was more frequent than phosphorylated alpha-synuclein. In contrast, AP with tauophathy didn’t show pathological deposits.
PD and AP with synucleinopathy had a significant IENFD reduction at cervical area, in comparison to healthy subjects and AP with tauopathy.
Histological analysis of skin biopsy could be a valid diagnostic tool to distinguish PD and AP with synucleinopathies from AP with tauopathies. Among the anatomical sites, the most informative is the cervical one and the most sensitive marker is oligomeric alpha-synuclein.

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Visto superiore (prego indicare Nome e Cognome del superiore)

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Criteri per sottomissione Abstract:
NO Case report
NO Abstract senza nessun risultato
VISTO da un superiore

Invio Abstract