

Rörelserubbningar och Parkinson, hur svårt kan det vara...

En översikt och problematisering av
en folksjukdom

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Man räknar med att 11 -19 personer /100 000 invånare insjuknar i Parkinson varje år. Om man tar med alla äldre Växlar uppgifterna om hur många som har sjukdomen men ca. 20 000 i Sverige



Det är svårt att ställa diagnos

“London Brain Bank Criteria”
NICE full guideline 2006

Parkinson's Disease.National clinical guideline for diagnosis and management in primary and secondary care. NICE full guideline.2006

Step 1. Diagnosis of a parkinsonian syndrome (1)

Bradykinesia and at least one of the following:

- muscular rigidity
- rest tremor (4-6 Hz)
- postural instability unrelated to primary visual, cerebellar, vestibular or proprioceptive dysfunction.

Step 2. Exclusion criteria for Parkinson's disease (PD)

History of :

- repeated strokes with stepwise progression
- repeated head injury
- antipsychotic or dopamine-depleting drugs
- definite encephalitis and/or oculogyric crises on no drug treatment
- more than one affected relative
- sustained remission
- negative response to large doses of levodopa (if malabsorption excluded)
- strictly unilateral features after 3 years
- other neurological features: supranuclear gaze palsy, cerebellar signs, early severe autonomic involvement, Babinski sign, early severe dementia with disturbances of language, memory or praxis
- exposure to known neurotoxin
- presence of cerebral tumour or communicating hydrocephalus on neuroimaging.

Step 3. Supportive criteria for PD

Three or more required for diagnosis of definite PD :

- unilateral onset
- excellent response to levodopa
- rest tremor present
- severe levodopa-induced chorea
- progressive disorder
- levodopa response for over 5 years
- persistent asymmetry affecting the side of onset most
- clinical course of over 10 years.

Reference:

- **(1) Parkinson's Disease.National clinical guideline for diagnosis and management in primary and secondary care. NICE full guideline.2006**

Förlångsamning
Tremor 4-6 Hz
Postural instabilitet

J Parkinsons Dis. 2013;3(1):19-29. doi: 10.3233/JPD-120159.

Found in transcription: accurate Parkinson's disease classification in peripheral blood.

Authors

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Abstract

BACKGROUND:

A blood-based test for the early detection of Parkinson's disease (PD) would be an important diagnostic tool and useful for patient selection when developing novel drugs or treatments for the disease.

OBJECTIVE:

Here, we aimed to identify potential biomarkers associated with PD.

METHODS:

We applied gene expression profiling to the study of peripheral blood from 75 healthy control subjects and 79 PD patients at different stages of the disease. Healthy control subjects were matched for age and gender with PD subjects, and the diagnosis of patients was based on clinical evaluation by specialists in movement disorders. **RNA was extracted from the blood samples and the gene expressions** were measured using the Illumina HumanHT-12 v4.0 Expression BeadChip.

RESULTS:

Our results support previous studies that gene expression in blood may be instrumental in the search for molecular biomarkers for PD. Single cross-validation results show that PD can be correctly classified from healthy controls with an agreement of 88% to clinical diagnosis. De novo **PD patients are classified with a sensitivity of 87%, which is close to what was achieved for the patients having a confirmed PD diagnosis with disease duration <5 and >5 years (93% and 88%).** A double cross-validation procedure showed that using a selected set of around 650 informative genes, similar results are achieved. Functional analysis of the selected genes showed genes significantly associated to mitochondrial dysfunction, protein ubiquitination, gene expression and cell death.

CONCLUSIONS:

PD affects gene expression in blood, suggesting the potential for the development of a blood-based gene expression test.

DOPAMIN.....

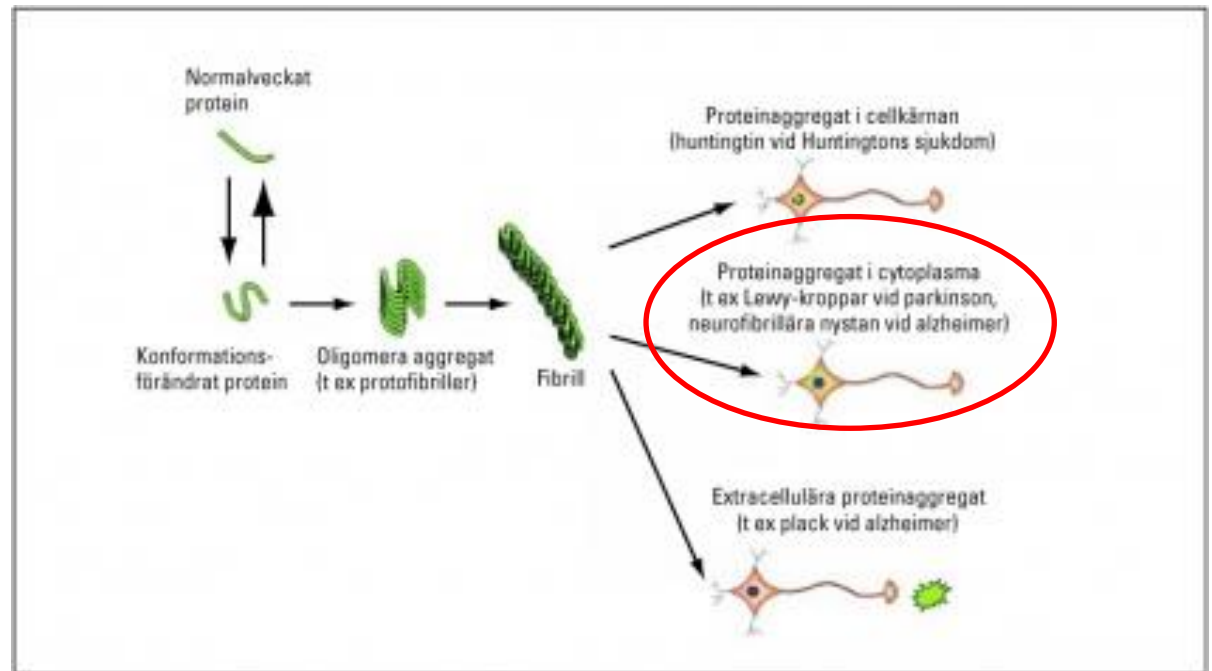
Striatum (putamen + caudatus) innehåller DA frisättning men också interneuron med Ach, serotonin och adenosinreceptorer

DA omsätts snabbt mellan nervcellerna



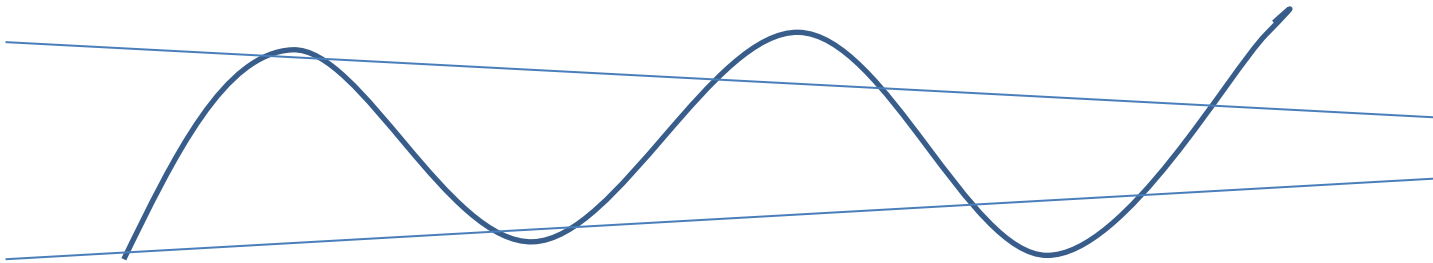
Molekylärt?

Alfa synuklein



Symptom progression

- 1/3 upplever symptomfluktuation efter 3-5 års sjukdomsduration.
- Nästan alla med "äkta" parkinson efter 10-15 år



Apomorphine pump / Apo go pen





All that shakes is not PD

Parkinson Plus Syndromes

- Multiple system atrophy
- Progressive supranuclear palsy
- Parkinsonism-dementia-amyotrophic lateral sclerosis complex
- Corticobasal ganglionic degeneration
- Diffuse Lewy body disease

Önskas hela föreläsningen

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On the effects of Tactile Touch in Parkinson´s Disease patients

“THE PARKITOUCH STUDY”

Örjan Skogar



Stockholm 2013

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