NEURO-PSYCHIATRIE

CONGRÈS HYBRIDE / HYBRIDE CONGRES

Depression vs Dementia: differential diagnosis

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Depression and dementia: a complex interaction



Depression causes cognitive impairment

Late-life depression can be accompanied by significant cognitive impairment (cfr, 'pseudodementia')

- Has generated awareness: rule out potentially reversible disorders that may mimic dementia
- But: some cognitive deficits after depression do not fully recover, even after successful treatment of depression
- But: denies the frequent co-existence of depression and dementia



Depression: risk factor for dementia?

Late-life depression: 3x more likely to develop dementia (as compared to no depression)

Late-life depression with cognitive impairment: 5x more likely to develop dementia (as compared to depression without cognitive impairment)



Dementia = risk factor for depression?

Mild cognitive impairment (MCI): 2x more likely to develop depression (as compared to elderly without cognitive impairment)

MCI + depression:

- Increased rate of cognitive decline
- Increased risk of conversion to dementia

AD dementia (moderate – severe): 50% show significant depressive symptoms

- At all disease stages
- Not only due to awareness of cognitive deficits



Depression and dementia: a complex interaction

In conclusion: late-life depression:

- Can lead to persisting cognitive deficits
- Increases the risk to develop dementia (all causes)
- Can co-occur with dementia

Is depression a modifiable risk factor for dementia?

Is depression an early sign of incipient dementia?



Which clinical features may help in the DD depression – dementia?



Clinical features for DD

Features	Depression	Dementia
Onset	More acute (days to weeks)	Gradual
Cognitive complaints	Significant subjective cognitive complaints	Lack of insight: minimize cognitive difficulties
Temporal relationship mood - cognition	Mood precedes cognition	Cognition precedes mood
ADL	May be normal	Deficits
Features with relative value for DD		
Apathy	Yes, in combination with depressed mood	Yes, but may be isolated (without depressed mood)
Sleep	Early morning awakenings	Frequent night awakenings, difficulty waking in morning



May neuropsychology help in the DD depression – dementia?



Neuropsychology in DD depression – dementia

Subjective cognitive complaints:

- More often in people with depression
- Not always indicative of true cognitive deficits
- Importance of neuropsychological exam (NPE)!

NPE in case of depression:

- Many do not show cognitive impairment
- If cognitive deficits: more frontal subcortical, like executive functions (as opposed to cortical pattern / memory in dementia)

Verbal learning and memory scores: highest in depression, lowest in dementia

- Cued recall: of help in case of depression, not in dementia
- Other cognitive domains: depression and MCI often comparable

Repeated NPE:

- Progressive worsening in case of dementia
- Stable or better in depression



Neuropsychological features for DD

Features	Depression	Dementia
Cued recall	Intact	Impaired
Recognition	Generally intact	Impaired
Language (naming)	Intact	Impaired
Praxis	Intact	Impaired
Orientation	Intact	Impaired
Primary area of cognitive impairment	Executive functioning	Memory (in case of AD)
Pattern of cognitive impairment	Subcortical	Cortical



May biomarkers help in the DD depression – dementia?



Alzheimer's disease CSF biomarkers





Alzheimer's disease CSF biomarkers

Depression versus MCI / dementia due to AD

- Diagnostic accuracy of 90% or more
- Not applicable in case of non-AD cognitive impairment

AD:

- Long preclinical phase, building up neuropathology without symptoms
- 1/3 of the cognitive intact elderly are amyloid +

No application of AD CSF biomarkers in case of a normal neuropsychological exam!



Conclusions



Conclusions

Depression and dementia: interactive factors

Differential diagnosis may be difficult

- Subjective cognitive complaints: depression > dementia
- Clinical features may help in the DD
- Neuropsychology helps in the DD
- AD biomarkers: only in case of objective cognitive deficits
- Treating depression, in case of dementia: less likely to respond to treatment, unlikely to have significant benefit on cognition





THANK YOU