

# Frontotemporal dementia

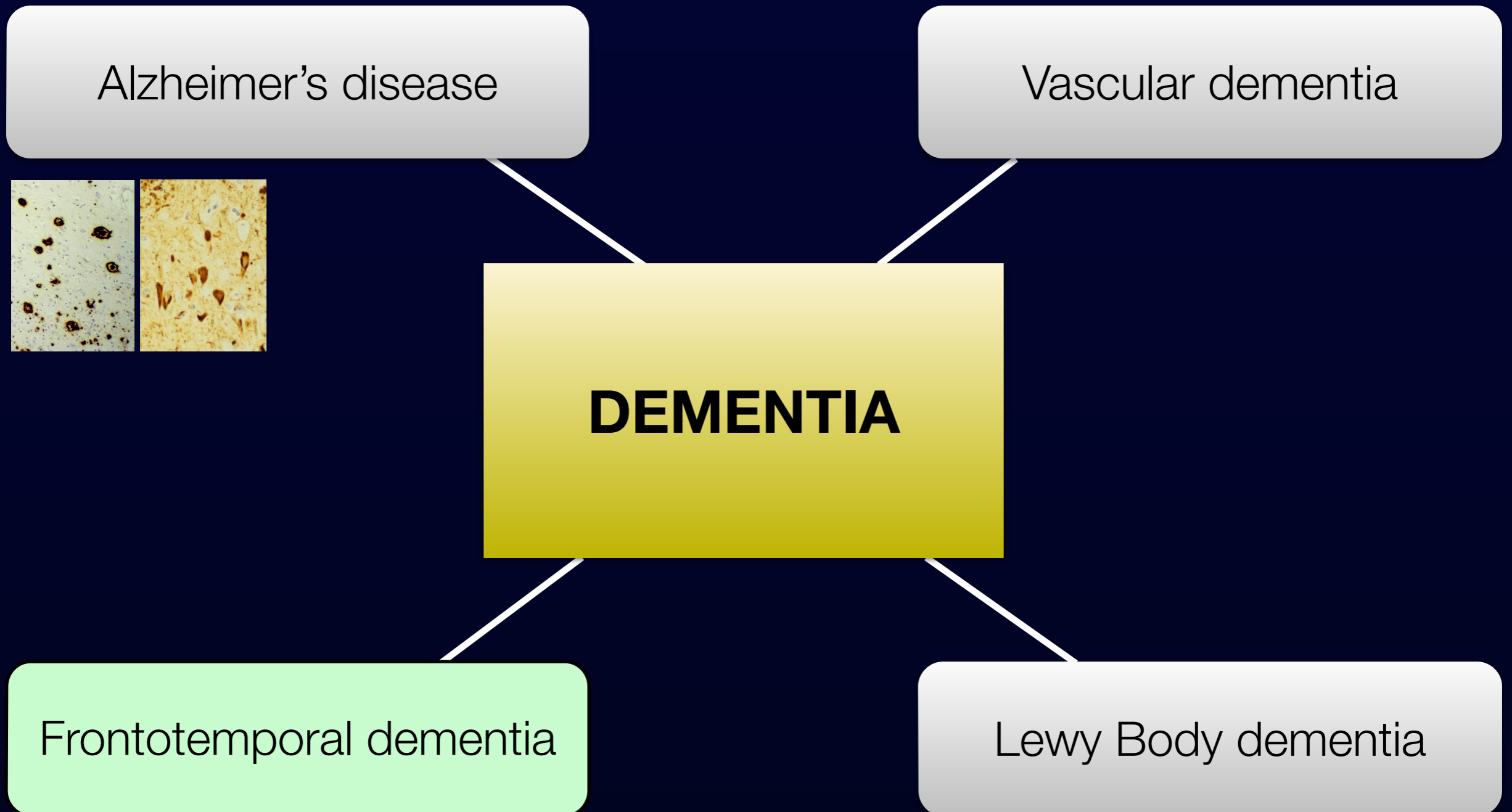
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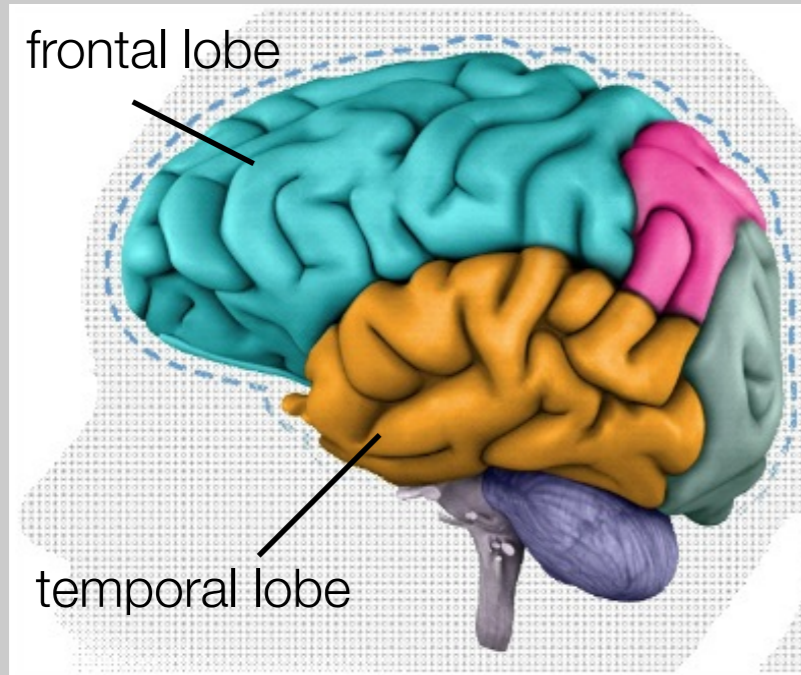
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# Dementia has different causes



# Frontotemporal dementia - the basics

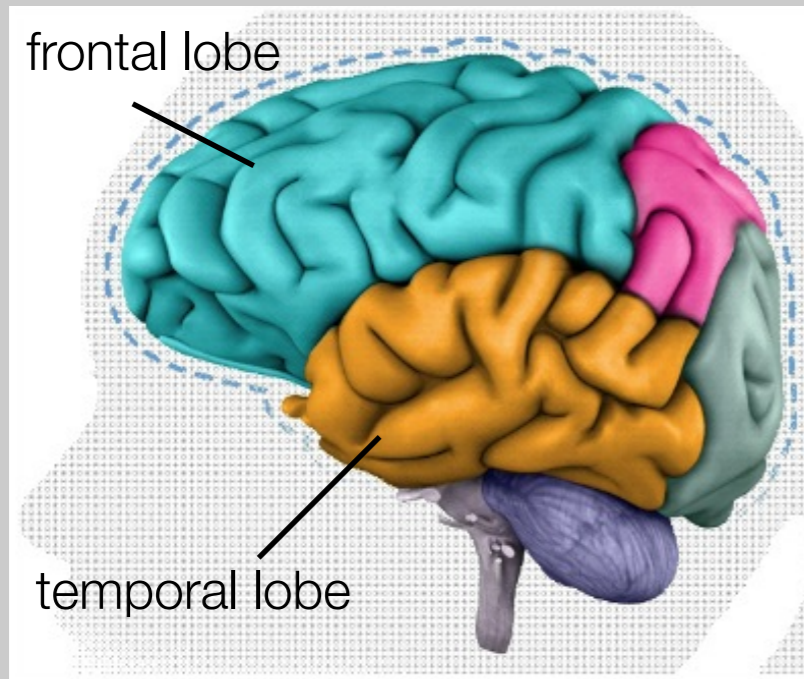


- Neurodegeneration affects *frontal* and *temporal* lobes
- Affects behaviour and language





# Frontotemporal dementia - the basics

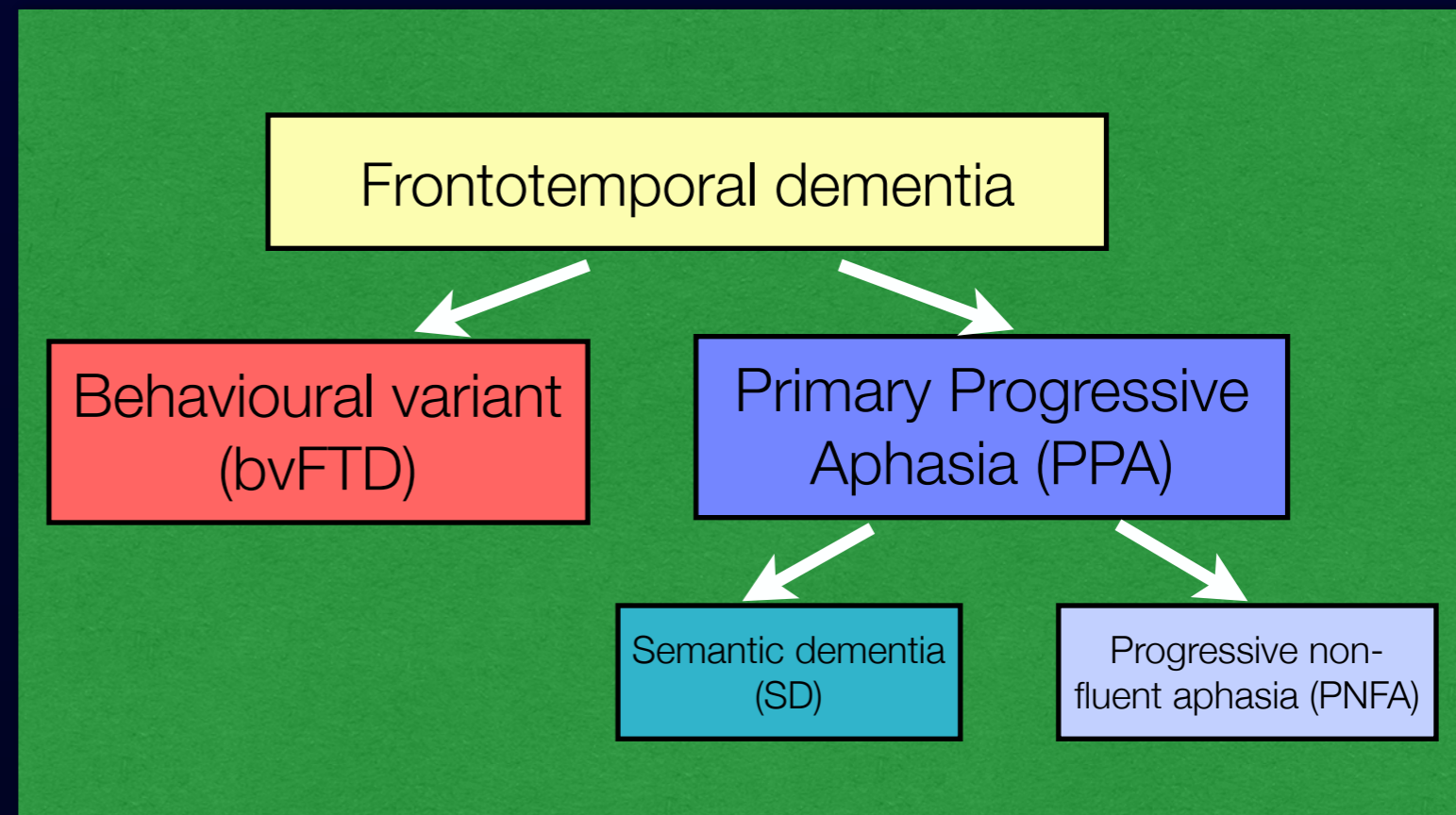
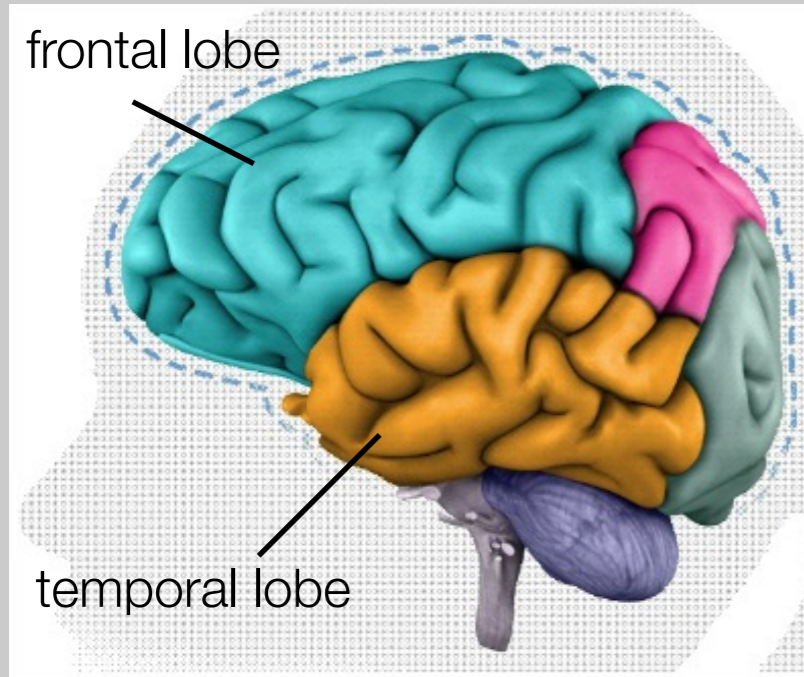


Arnold Pick  
(1851-1924)



- Neurodegeneration affects *frontal* and *temporal* lobes
- Affects behaviour and language
- Previously known as ‘Pick’s disease’
- Second most common cause of dementia <65 yrs
- 20,000 people with FTD in UK

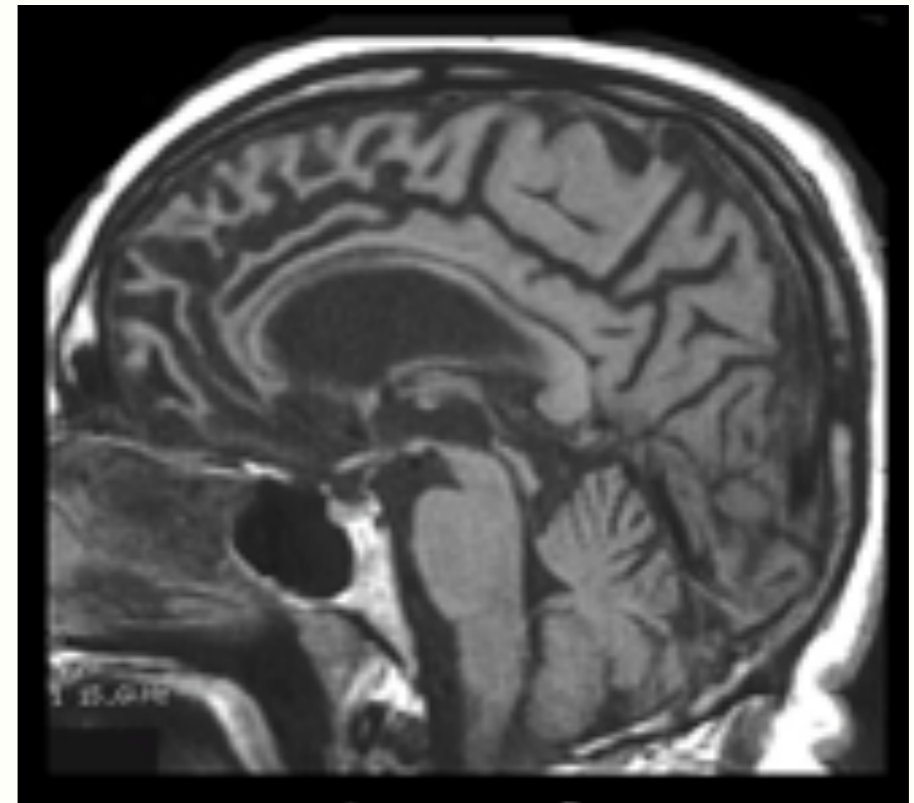
# Frontotemporal dementia - the basics





# Behavioural variant FTD

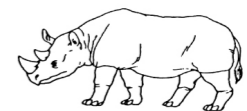
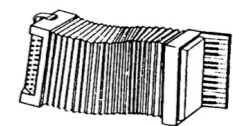
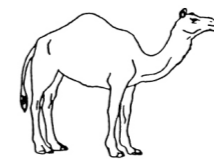
- 'Susan' - 58 year old taxi driver
- Careless driving, 'road rage'
- Singing in public
- Disinterested in others
- Obsessive Sudoku
- Eating chocolate biscuits
- Mother died of MND



Slowly progressive changes in behaviour  
Often misdiagnosed initially  
Family history is common  
Motor features (MND, parkinsonism) common

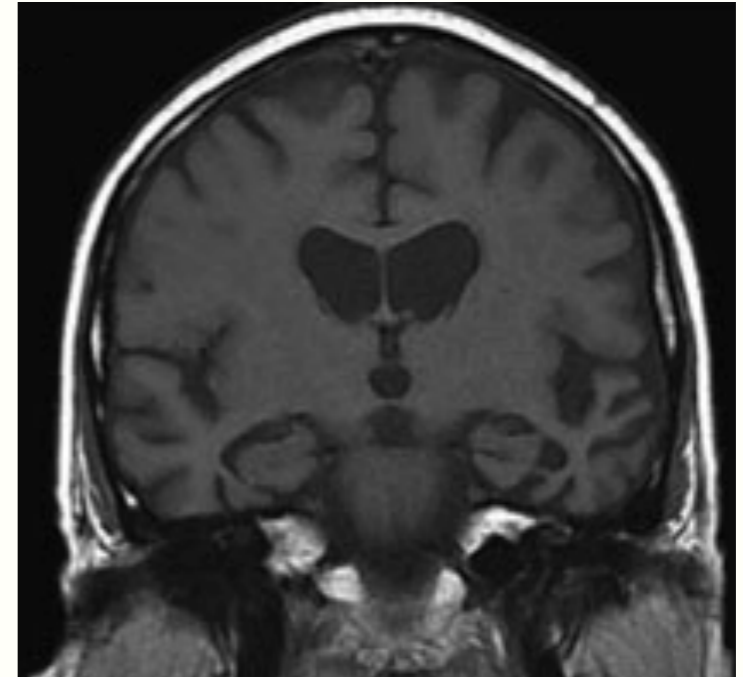
# Semantic dementia

- 'John' - 56 year old engineer
- 4 years progressive language problems
  - finding words
  - understanding speech
  - recognising objects/people
- No difficulties driving or doing finances



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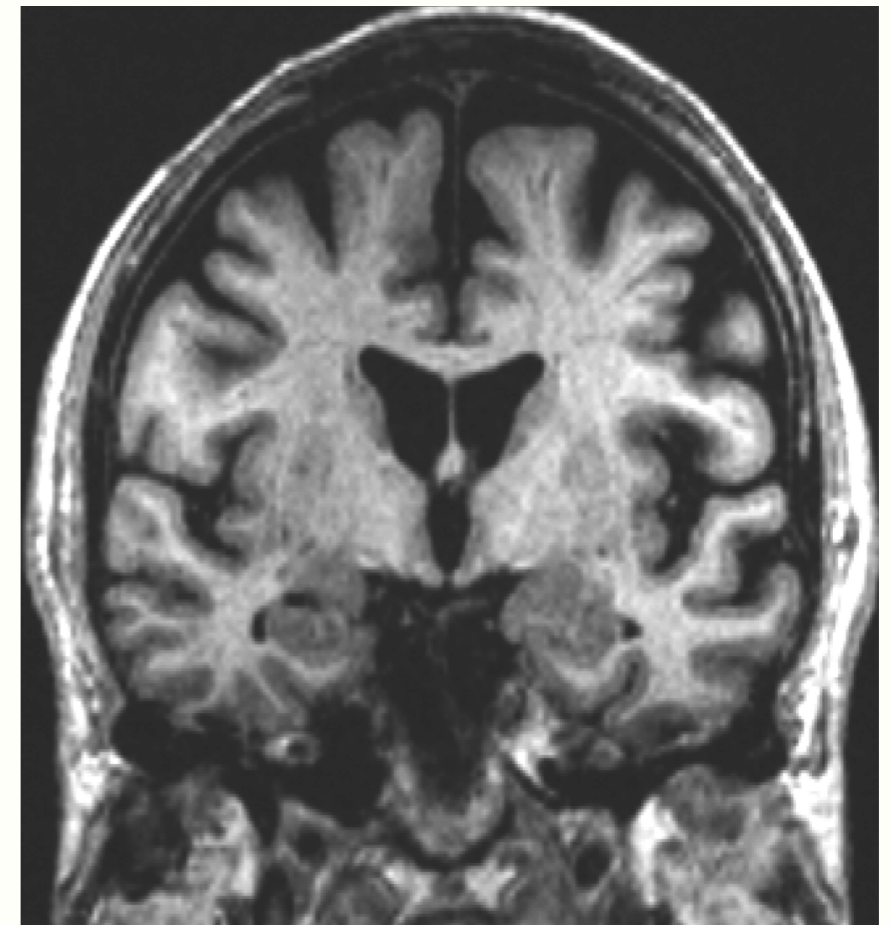
Progressive loss of 'semantic' knowledge  
Memory for events and navigation OK  
Left temporal lobe of the brain  
Changes in behaviour come later



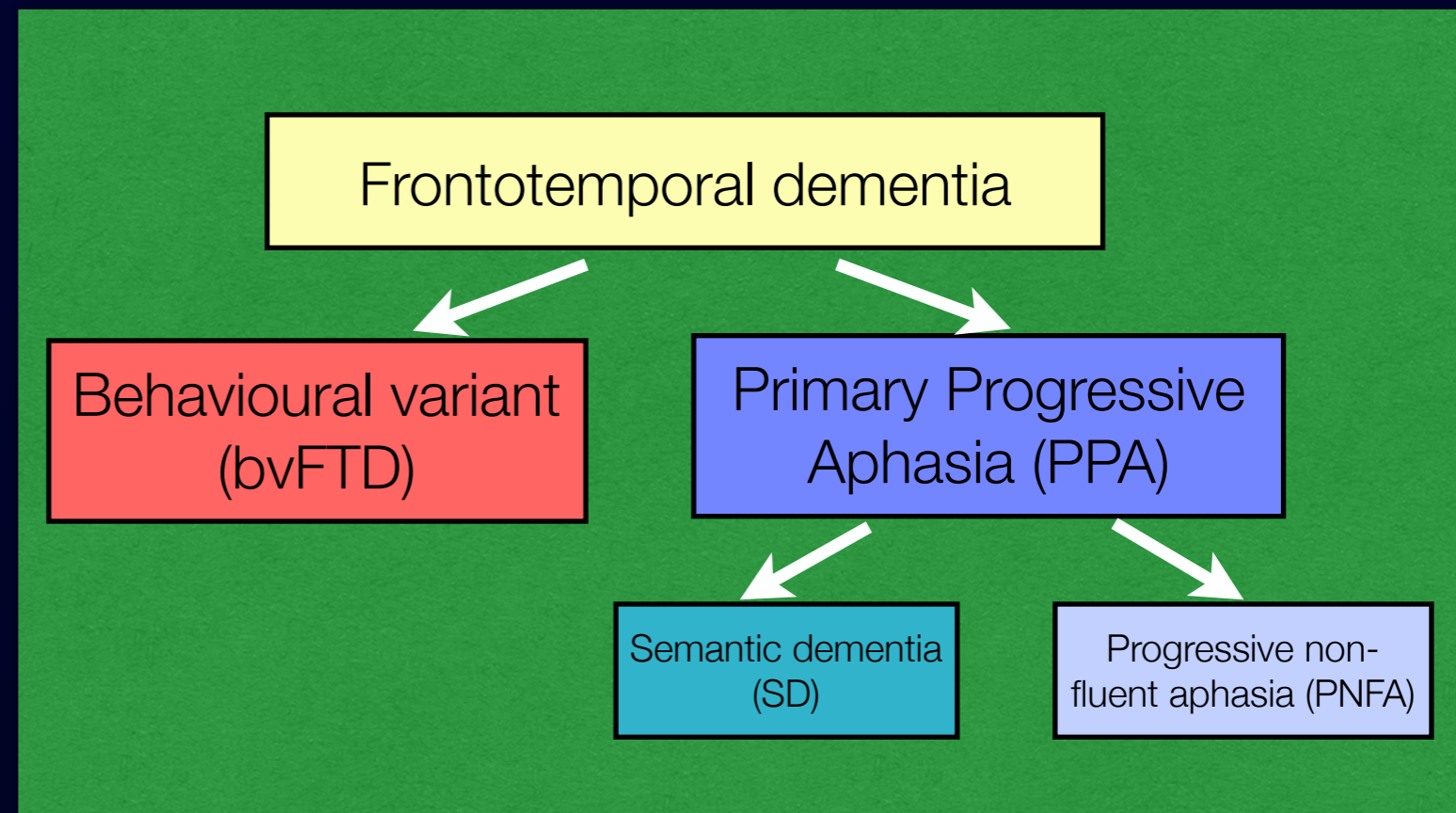
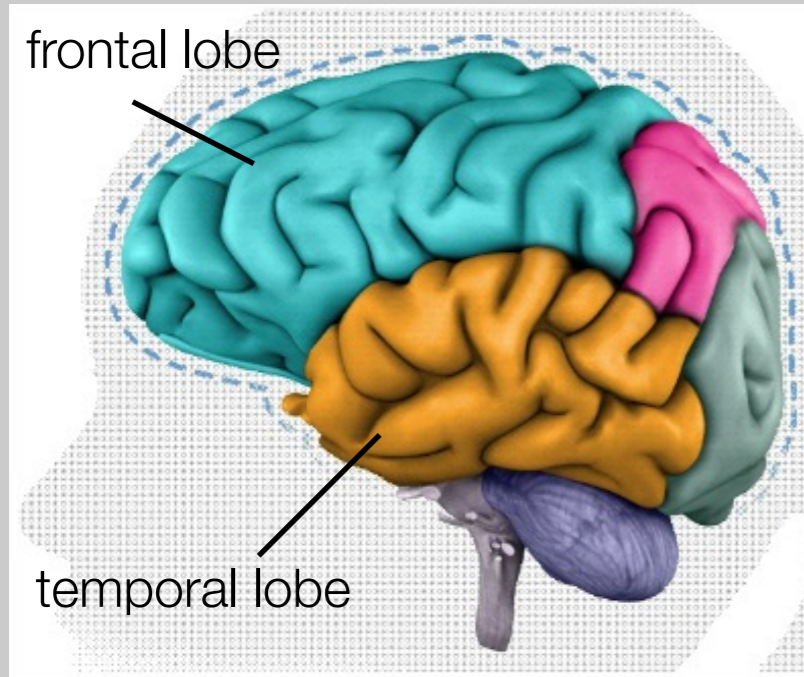
# Progressive non-fluent aphasia

- 'Margaret': 68 year old
- 3 years progressive problems:
  - speaking is 'hard work'
  - mispronunciation of words
  - shorter sentences
- Otherwise completely independent

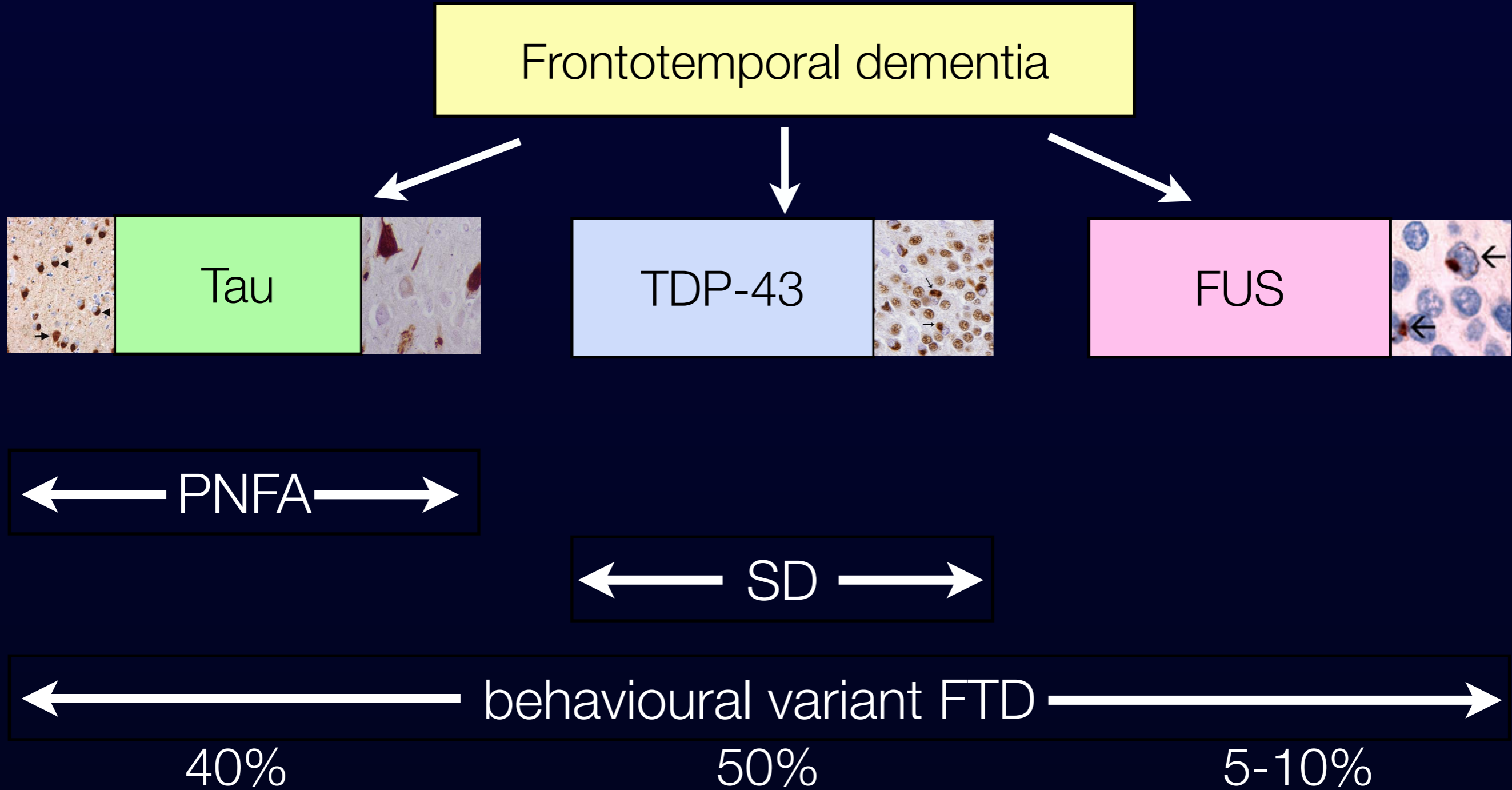
Progressive speech difficulty  
Understanding of speech OK  
Left hemisphere damage



# Frontotemporal dementia - the basics



# What causes FTD?



# Genetics

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## Behavioural variant FTD

- 1 in 10 cases is clearly familial
- 3 key genetic mutations identified:
  - Chromosome 17: Tau (**MAPT**): <65 yrs at onset
  - Chromosome 17: Progranulin (**GRN**): often >65 yrs at onset
  - Chromosome 9: **C9ORF72** expansion
- C9ORF72 especially in FTD-MND cases





# Summary

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- FTD is a common cause of younger-onset dementia
- Diagnosis can be difficult
- Patients and carers have specific needs
- Recent advances in FTD research uncovering neurodegeneration pathways