SUMMARY OF NEURODEGENERATIVE DISEASES

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	Genetics	Protein abnormality	Type of inclusion	Symptoms
Alzheimer disease	-Majority sporadic -Trisomy 21 -abnormal secretaries (increased beta secretes) -Polymorphisms in Apolipoprotein E (Apo E)	-AB amyloid as a primary problem - hyperphosphorylated Tau as a secondary effect	Extracellular amyloid plaques Intracellular Tau (neurofibrillary tangles)	Dementia Memory loss precedes personality changes
Frontotemporal dementia (FTLD)	Majority sporadic Some familial relate to Tau gene mutations	Hyperphosphorylated Tau	Intracellular Tau as neurofibrillary tangles or as Pick bodied	Changes in personality and language precede memory loss
Pick disease	Majority sporadic Some familial relate to Tau gene mutations	Tau	intracellular Tau as Pick bodies	Subtype of FTLD
Parkinson	Majority sporadic	Alpha synculien	Intracytoplasmic inclusions= lewy bodies	Motor: stiffness, bradykinesia resting tremors
Huntington chorea	Inherited Autosomal dominant Trirepeat nucleotide mutation	Huntingtin protein	Intranuclear	motor: uncoordinated dance like movement
Freidrick ataxia	inherited autosomal recessive Trinucleotide repeat mutation	Frataxin.. decreased due to transcriptional silencing	None no increased protein synthesis So no inclusions	Ataxia symptoms: uncoordinated gait Refere to the slides for more details
ALS	Sporadic or inherited Inheritance variable	Variable SOD 1 commonest	Variable depending on mutation	motor weakness