POST-MORTEM EVALUATION OF OLDER ADULTS WITH SCHIZOPHRENIA

Research Objectives:
Cognitive impairment is a recognized trait in patients with schizophrenia, defined by noticeable deficits in attention, learning and memory, working memory, and executive function. These may manifest prior to the emergence of fully-developed schizophrenia, show relative stability over the course of illness, and accelerate during aging. This age-related cognitive decline is not associated with neurodegenerative pathology, considering elderly patients with schizophrenia have a similar incidence of neurodegenerative conditions as the general population, and remains poorly understood. We therefore sought to perform clinicopathological correlations in a well-defined cohort of older adults with chronic schizophrenia and brain autopsy to identify possible causative and/or contributing factors to age-related cognitive decline in schizophrenia.

Methods:
55 cases of older adults with schizophrenia were evaluated. All cases had extensive clinical assessment and neurocognitive testing, focusing on attention, memory, and executive function, and detailed post-mortem neuropathological evaluation. Cases were grouped based on the degree and type of neuropathological findings into age-appropriate, mild, moderate, or severe neuropathology. Demographic and clinical variables, including degree and type of cognitive impairment, will be evaluated for each group.

Results:
Demographic variables were not statistically different between groups. Average age of onset ranged from 20.85 to 27.06, and average disease duration was 50.44 to 59.23 years. The majority of cases per group were male (92% to 100%), and most patients within each group smoked (69% to 92%). Number of patients on antipsychotics was inversely correlated with neuropathological burden. Clinical variables are currently under investigation; however, preliminary evidence indicates that there is no significant differences based on neurodegenerative pathology.

Conclusions:
These results suggest that age-related cognitive decline observed in schizophrenia occurs independent of neurodegenerative pathology. Future studies will aim to provide further insights into the factors responsible for this neurodegeneration-independent cognitive decline opening potential avenues for intervention.