Progressive Increase of Alzheimer’s Disease Pathology in 5xFAD Transgenic Mice

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MATERIALS and METHODS

5xFAD mice bear 5 mutations, 3 in the APP695 gene as well as 2 mutations in the presenilin 1 gene. The expression of the 5xFAD transgene is driven by the neuron-specific Thy1 promoter. Here, we analyzed the soluble and insoluble fraction of whole brain lysate from 5xFAD mice over age for aggregated Aβ by A4 assay and for Aβ and Aβ aggregates as well as neuroinflammation as indicated by astrogliosis and activated microglia by immunofluorescent labeling followed by quantification.

RESULTS

Our results show a progressive increase of Aβ40 and Aβ42 aggregates as well as neuroinflammation in the cortex and hippocampus of 3 to 9 months old 5xFAD mice.

SUMMARY and CONCLUSION

These results suggest that 5xFAD mice are not only a well-suited model for Aβ research but also to analyze Alzheimer’s disease-related neuroinflammation.

Contact for more information about the model:
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