TSPO PET INSIGHTS INTO NEUROIMMUNE ASYMMETRY

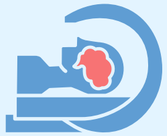
CONTEXT

Structural asymmetry is well known

Immune asymmetry is still unclear

Lateralization of neuroinflammation in human brain

TSPO PET imaging is an advanced method to investigate CNS immune response



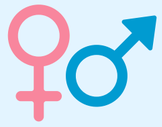
METHODS

72 healthy controls

7 ROIs investigated

Lateralization Index calculated for TSPO uptake

Statistical analyses to assess the presence of lateralization



Covariate contributions via linear modeling

FINDINGS

Immune function shows no significant lateralization

Structural asymmetry is the most consistent predictor of immune lateralization

LIMITATIONS

Uneven gender distribution

Few covariates included

Healthy cohort only

CONCLUSION

In healthy individuals, immune function does not exhibit significant lateralization. Structural asymmetry emerges as a major predictor. Larger, more inclusive studies are needed to confirm these results.

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