Plasticity of Language-related Brain Function During Recovery From Stroke.

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Psych 260 presentation

Quick Summary
- Understanding my Presentation
- Intro
- Subjects and Methods
- Results and Pictures
- Discussion
- My view and Questions

Understanding My Presentation
- Words you need to know!
  - Aphasia
  - Wernicke’s and Broca’s Area
  - Neuroplasticity

Big Question/New Title
- What happens in the brain when stroke patients recover from aphasia?

Introduction
- Language = left hemisphere
- Right side can take over
- This study = recent stroke victims!

Subjects
- Controls: six right handed males
- Experimental Group: Two stroke patients
  - Stroke patient #2:
    - Epileptic
    - MRIs taken previous to stroke
Methods

- Both stroke patients:
  - 3 MRI sessions.
  - 5 hours, 76 hours, 6 months

Results

- Most rapid recovery 3 days after.
- Both = almost full recovery
- Increased activation in homologous areas of the right hemisphere

**Patient 1 MRI**
- Top Row = 5 hours
- Middle Row = 76 hours
- Bottom Row = 6 months

**Patient 2 MRI**
- Top Row = 5 hours
- Bottom Row = 6 months

Discussion

- Damage causes 2 things
  - Activation up in contralateral areas
  - Activation up in proximal areas
  - Spontaneous redistribution of function to the right hemisphere.

My Opinion & Next Step

- Only Two Experimental Subjects?!?!?!?
- Responsible Discussion
- Next Step:
  - Best step to take is very difficult
  - Enlist Hospitals' help.
Questions?