Introduction

- What do you know about anxiety disorder?
  Anxiety disorder are a set of pathological fears and anxieties like:
  - posttraumatic stress disorder (PTSD)
  - social anxiety disorder
  - specific phobia
  - normal fears
  - [...]
Objective

• The focus of this study is show that:
  – There is a link between anxiety disorders and specific areas of the brain.

Hypothesis

• My hypothesis is that there is a link between anxiety disorders and specific areas of the brain like the amygdalae and insular cortices.

Material and Methods

• Subjects:
  Patients with some kind of anxiety disorder and healthy patients.
  Also we take patients with different age and gender.

• Experimental paradigm:
  Searched for common and disorder-specific functional neurobiological deficits in several anxiety disorders.
Material and Methods

How do it?
During the test, patients will be subjected to such a state of stress by increasing their anxiety. It will be through image and sounds. Example:
To brain activation of fear in healthy patients we use phobia-related (ex.: spider) and neutral pictures.

Material and Methods

• Design:
  PTSD
  Specific phobia
  Fear conditioning in healthy individuals
  Neuroimaging Techniques
  + Increase stress
  Subjects with different anxiety disorders.

RESULTS

Subjects with different anxiety disorders.

Material and Methods

• Neuroimaging techniques.
Why two Neuroimaging techniques?
We also use PET techniques to save the results.
So, maybe in some patients will find out a lower activation and throw PET we’ll be able know if the reason is that they’ve few neurotransmitters.

Material and Methods

• Results:
The forebrain is the area most affected in people with anxiety disorders.

Results are shown for the amygdalae (A) and insular cortices (B).
Problems

• The study need a large number of subjects. Actually it represent a relatively limited population size.
• Noted age and gender ratio differences between subjects.
• The PET techniques require a meticulous process.