

ANXIETY DISORDERS (p.1)

Anxiety = persistent, chronic fear that persists in absence of any direct threat

Most prevalent of all the psychiatric disorders

25% risk over lifetime

in United Kingdom, 1/5 women and 1/10 men take antianxiety (anxiolytic) medications

Has a close relationship with **depression**

Different examples of **anxiety disorders**:

Generalized anxiety disorder (GAD):

S feels anxious most all the time, chronic stress response

Phobic Disorder:

Acute stress response/anxiety to given stimulus

Stimulus can have a learned history

Stimulus is often a “biologically relevant” threat (easier to form the Conditioned emotional response?)

e.g. dogs, snakes, great heights, enclosed in small spaces
includes agoraphobia (fear of open spaces)

Panic Disorder:

Acute stress response/anxiety without a given stimulus (although S often forms a “phobic” response to what S thinks caused the reaction)

Fear of fear response

e.g. to driving on the freeway, to sitting in a restaurant

Obsessive-compulsive Disorder:

Frequently recurring, uncontrollable anxiety that involves obsessive thoughts (“I killed my children”) and compulsive actions (checking, counting, cleaning, etc.)

Doing the compulsive actions seems to reduce the obsessive thoughts...
for awhile at least

Causes: there are significant **genetic factors** in all anxiety disorders

ANXIETY DISORDERS (p.2)

Neural Bases:

Amygdala must be involved (because of its role in anxiety/fear)

Basal ganglia & anterior cingulate gyrus seem also to be involved in

Ob-com disorder

GABA agonists help reduce anxiety

Is S low on GABA?

Drug Treatment for anxiety disorders:

GABA agonists help reduce anxiety (are anxiolytic)

e.g. **benzodiazepines (BZDs)**

Valium/diazepine

Most widely prescribed drugs in USA (about 10% of population)

Are GABA A RS agonists

Have a moderately high addiction/abuse potential

Are relatively safe to use (lethal dose level is very high)

e.g. ethanol

e.g. **antidepressants** (incl. SSRIs)

BuSpar/buspirone (agonist at 5HT 1a RS)

Have the advantage of not producing ataxia, muscle relaxation, sedation

And no addiction/abuse potential

Other Related Disorders:

Tourette's Syndrome

a "tic" disorder – involuntary, repetitive, stereotyped movements/vocalizations

begins usually in childhood with simple motor tics (e.g. eye blinks)

movements become more complex & severe with time, incl. vocalizations

e.g. inarticulate sounds (barking, grunting)

e.g. repeating obscenities, e.g. repeating words of others

e.g. movements of limbs, skipping, twirling

0.7% of children, 3 males : 1 female

major genetic component (concordance 55% for MZ, 8% for DZ twins)

ANXIETY DISORDERS (p.3)

Other Related Disorders:

Tourette's Syndrome (cont.):

high degree of overlap with ADHD, OCD, or both
tics can be suppressed for brief periods of time with a great deal of effort and concentration on part of pt.; eventually, tics must occur again, and will be briefly more frequent & intense after this suppression

brain mechanisms: abnormalities seen in basal ganglia, limbic cortical areas (cingulated gyrus), and cortical association areas
abnormalities in basal ganglia/thalamus/cortex circuit likely

treatment: with **DA2 RS blockers** (antipsychotic = neuroleptic drugs), so there may be an **excess of DA activity** in striatum/limbic cortex

note: **ADHD pts.** (both children and adults) are also now known to have **abnormalities in DA circuits (too little DA activity)**

Ritalin (**methylphenidate**) --- increases release of DA --- greater experience of focused attention, "interest" on part of pt.

baseline DA levels in ADHD pts. are lower vs. NCs

ADHD pts. have greater #/activity in DA presynaptic transporter proteins (--- lower DA in synaptic cleft) vs. NCs