DSM IV ANXIETY DISORDERS

- Panic attack
- Agoraphobia
- Panic disorder without agoraphobia
- Panic disorder with agoraphobia
- Agoraphobia without history of panic disorder
- Separation Anxiety Disorder
- Specific phobia
- Social phobia
- Obsessive Compulsive Disorder
- Post-traumatic Stress Disorder
- Acute Stress Disorder
- Generalised Anxiety Disorder
- Anxiety Disorder due to a general medical condition
- Substance induced anxiety disorder
- Anxiety Disorder not otherwise specified

Conditions in which anxiety is frequently comorbid

- Major Depressive Disorder
- Pervasive Developmental Disorders
- ADHD
- Tourette Disorder
- Adjustment Disorders
- Eating Disorders
- Substance related disorders
- Psychotic Disorders

WORRY VS ANXIETY DISORDER

• Orton (1982)

 70% of primary age children reported 10 or more things about which they worried

• Bell-Dolan (1990)

 30% of children exhibited subclinical levels of excessive worry

• Vasey & Daleiden (1994)

- 3-4 year olds worry about imaginary and supernatural threats;
- 5-6 year olds worry about threats to physical well being
- 8-12 year olds worry about social acceptance, psychological well being

WORRY

- Muris et al (1998), School age children 8-13 years
 - 70% worried on average 2-3 days per week
 - Content related to school performance, dying, health, and social acceptance
 - Modest levels of interference with daily function
 - 6.2% exhibited symptoms of worry in pathological range sufficient to satisfy criteria for GAD
 - Anxiety and depression strongly associated
 - Girls > Boys
 - No evidence that these worries were linked to threatening aversive events

Treatment options

- Stabilise routines
- Psychotherapy
- Cognitive behaviour therapy
- Relaxation training
- Medication

Behaviour management

- Exude confidence and hope
- Stabilise routines
- Clear firm rules and expectations
- Change dynamics by involving the doctor
- Stepwise desensitisation
 - Examples sleep, school refusal
- Rewards for success

CBT

- Thoughts affect feelings
- > 8 years old
- Identify warning signs, temporal associations
- Self talk, positive reframing
- Emergency relaxation techniques
 - relax hands, deep breathing
- Maintenance relaxation techniques
 - muscular relaxation, visual imagery
 - physical exercise
- Success breeds success

Medications used to treat anxiety

- SSRI's
- SNRI's
- TCA's
- Neuroleptics
- Benzodiazepines

Scientific evidence scant in kids

- Tricyclics for school refusal, separation anxiety, autistic disorder
- Alprazolam, Clonazepam for adolescents with GAD and panic disorder
- Fluoxetine for separation anxiety disorder, social phobia, GAD, selective mutism
- Sertraline for OCD, ?depression
- Propranolol in PTSD symptoms
- Despiramine, clonidine, pimozide and haloperidol in tics

Number of Prescriptions USA - 2000 Children 5-18 years

Stimulants SSRI's TCA's **Adrenergic agonists Neuroleptics** Benzodiazepines Anticonvulsants Lithium **Other antidepressants**

5,971,000 1,083,000 969,000 431,000 355,000 280,000 185,000 175,000 106,000

Jensen PS et al. J Am Acad Child Adolesc Psychiatry 2002;38:557-565

MEDICATION TARGETS

	ATTN	ANG	MOOD	ANXIETY	TICS
STIMULANTS	****	++	+	-	-
CLONIDINE	+	++	++	+	++
TRICYCLICS	+	++	++	+++	++
SSRI's	-/+	++	+++	++	+
SNRI'S	++	++	+++	+++	+
BENZO'S	-	+	+	++++	+
NEUROLEPTICS	-	+++	++	+++	+++

SSRI'S

- Prozac, Lovan, Zactin
- Zoloft
- Aropax
- Luvox
- Ciprimil

POTENCY OF SSRI's

- 1. Aropax (most potent, least activating)
- 2. Luvox, Ciprimil
- 3. Sertraline
- 4. Prozac(least potent, most activating)

Potency does not correlate with clinical effect

SELECTIVITY OF SSRI's

- Aropax (most)
- Ciprimil
- Zoloft
- Luvox
- Prozac (least)
- In higher doses all SSRI's also inhibit the reuptake into the presynaptic terminal of dopamine and noradrenaline
- Zoloft is more dopaminergic than the others
- Selectivity profile not related to clinical efficacy

SSRI'S - pharmacokinetics

- Half life related to activity of parent compound and primary metabolites
- Fluoxetine (up to 4 days)
- Paroxetine (1 day)
- Steady state not achieved for 7 28 days
- Blood levels detectable 2-6 weeks after discontinuation
- Hepatic metabolism highest in younger ages

SSRI's - side effects

- Much less anticholinergic SE's than TCA's
- Generally safe and very well tolerated
- Nausea, diarrhoea, vomiting
- Agitation, disinhibition, jitteriness, insomnia, mania
- Extrapyramidal reactions with neuroleptics
- Increased risk of suicide

SNRI's

Venlaxafine (Efexor)

Benzodiazepines

Alprazolam (Xanax)
Clonazepam (Rivotril)
Other (Valium, Serepax, Temazepam etc)

CASE 1 - SARAH dob 6-9-85

- Irritable, ornery, oppositional, reactive anger since early life
- Increasing unhappiness, agitation, nervousness, and panic over last 3 months. Episodic breathlessness, palpitations, nausea, butterflies in stomach, dizziness. Shakes frequently. Reluctant to go to school or venture outside the house. Uncomfortable in social situations, and in shopping centres. Watches TV all day long, feels most comfortable being at home. Will visit friends but increasingly reluctant to do so. Says she's unhappy. Suicidal thoughts but no formulated plan. Difficulties concentrating, deteriorating school performance. Describes headaches, occasional abdominal pain.
- Symptoms coincident with recent unhappy contact with father who lives overseas. Parents separated 6 years. Mother with on again off again relationship with defacto. Sarah feels angry with mother because she keeps taking defacto back. 17 year old sister who is high achiever

CASE 1 - SARAH continued

- Achenbach profiles
- DIAGNOSIS -
 - Panic disorder with agoraphobia
 - Depressive symptoms
- TREATMENT
 - Counselling to explore nature of her feelings, relationship with family members
 - Encourage routine, school attendance, discourage insular behaviour
 - Relaxation exercises
 - Medication Efexor, Xanax

Panic Disorder

A. Both (1) and (2)

- 1. Recurrent unexpected panic attacks
- 2. At least one of the attacks has been followed by 1 month (or more) of one (or more) of the following
- (a) Persistent concern about having additional attacks
- (b) Worry about the implication of the attack or its consequences (eg losing control, having a heart attack, going crazy)
- (c) a significant change in behaviour related to the attacks
- B. Presence or absence of agoraphobia
- C. The panic attacks are not due to the direct physiological effects of a substance or a general medical condition
- D. The panic attacks are not better accounted for by another mental disorder, such as social phobia, specific phobia, OCD, PTSD, or separation anxiety

Generalised Anxiety Disorder

- A. Excessive anxiety and worry most days for >6 months about a number of events or activities (work or school)
- **B.** The person finds it difficult to control the worry
- C. Anxiety is associated with 3 or more of the following 6 symptoms
- restlessness of feeling keyed up or on edge
- being easily fatigued
- difficulty concentrating or mind going blank
- irritability
- muscle tension
- sleep disturbance
- D. Focus not related to panic attack, social phobia, OCD, separation, gaining weight, multiple physical complaints, physical illness, or PTSD
- E. Anxiety causes clinically significant distress or impairment in social, occupational or academic functioning
- F. Not due to the direct physiological effects of substance abuse and does not occur during a mood disorder, psychotic disorder, or PDD

CASE 2 - BRADLEY dob 10-4-84

- 17 yo Prader Willi syndrome, mild intellectual disability, type 2 diabetes
- Coping well at special school
- Unstable at home. Irritable, obsessional, violent towards mother, yells screams and hits out when things don't go his way. Recent trip to Hong Kong to visit his father (separated from mother 4 years) has exacerbated his symptoms. Lacks remorse. Unable to see things from the perspective of others. Somewhat socially isolated.
 Anxious in new situations but warms up. Anxious and agitated if routines disrupted or if exposed to change
- On prozac 20mg /day for last several years.
- Increase in weight over last 12 months. Now 110kg

CASE 2 - BRADLEY continued

• DIAGNOSIS

- Prader Willi syndrome
- Type 2 diabetes
- Obesity
- Oppositional Defiant Disorder
- Anxious/obsessional personality traits that do not meet criteria for disorder

TREATMENT

- Anger management counselling
- Behaviour management strategies for mother
- Review medication
 - ? Increase prozac, ?Trial tofranil or efexor

Anxiety Disorder NOS

Disorders with prominent anxiety or phobic avoidance that do not meet criteria for any specific Anxiety Disorder, Adjustment Disorder with Anxiety, or Adjustment Disorder with Mixed Anxiety and Depressed Mood. Examples include (1) Mixed anxiety-depressive disorder: clinically significant symptoms of anxiety and depression, but the criteria are not met for either a specific mood disorder or a specific anxiety disorder

(2) Clinically significant social phobic symptoms that are related to the social impact of having a general medical condition or mental disorder

(3) Situations in which the clinician has concluded that an anxiety disorder is present but is unable to determine whether it is primary, due to a general medical condition, or substance abuse

CASE 3 - DAMIEN dob 7-12-92

- 8 year old, always sensitive. Oldest of 4 sibs
- Last 4 weeks, can't settle in bed at night, terrified of robber breaking into house and hurting him. Goes to bed reluctantly. Insists on light on. Calls out for parents to attend to him. Settles when parents in the room.
 Becomes anxious again when parents leave. Stays in room but continues to call out. Takes 2 hours to get to sleep. Sleeps through. Tired in AM. Reluctant to go into bedroom during the day without company. Sometimes takes 18 month old sister with him
- No daytime anxiety symptoms. No school refusal. Class captain. Doing well academically. Socially well connected. Involved in Auskick. Barracks for Collingwood
- Triggers? New house 6 months ago. ?News broadcasts. Life circumstances very stable

CASE 3 - DAMIEN continued

• DIAGNOSIS

- ?Separation anxiety disorder vs Specific phobia
- Short duration symptoms confer good prognosis

TREATMENT

- Short term counselling
- Behaviour management program. Set expectations. Later bedtime, night light, torch, radio, brother in room, incentive system for staying in room without calling out. Relaxation techniques for acute anxiety
- "Mastery begets mastery"

Separation Anxiety Disorder

- A. Developmentally inappropriate and excessive anxiety concerning separation from home or from attachment figures. Three or more:
 - (1) Recurrent excessive distress when separation from home or major attachment figures occurs
 - (2) Persistent worry about harm befalling major attachment figures
 - (3) Persistent and excessive worry that an untoward event will lead to separation from a major attachment figure
 - (4) persistent reluctance to go to school or elsewhere
 - (5) persistently fearfulness about being alone
 - (6) Persistence reluctance to go to sleep
 - (7) repeated nightmares involving the theme of separation
 - (8) physical symptoms with separation (headaches, tummy aches)
- **B. Duration of disturbance at least 4 weeks**
- C. Onset before 18 years
- D. Clinically significant distress in social or academic functioning
- E. Symptoms not related to PDD, Psychosis, Panic Disorder

CASE 4 - PAUL dob 26-12-88

- 12 year old. Always sensitive anxious but not incapacitating
- 4 months increasing obsessional thoughts, fear of disease and germs, difficulties touching food, need to spit out rather than swallow saliva. Distressed if someone touches him. Carefully examines all food. Asks questions of mother repeatedly about how she prepares food. Washes hands repeatedly, up to 5 times in a row, multiple times per day. Knows fears are irrational but can't change behaviour
- Triggers? Stress of year 7, PGM's diagnosis of benign brain tumour. Own diagnosis of epilepsy 6 m ago, On tegretol
- Copes OK at school. Involved in sport. Solid friendships

CASE 4 - PAUL continued

• DIAGNOSIS

Obsessive Compulsive Disorder

TREATMENT

- Medication Aropax
- Psychotherapy referral
- Chronic relapsing course of OCD mandates long term treatment

Obsessive-Compulsive Disorder

A. Either obsessions (1) or compulsions (2)

- (1) Recurrent and persistent thoughts, impusles or images that are experienced as intrusive and inappropriate and that cause marked anxiety or distress
- Not simply excessive worries about real life problems
- The person attempts to ignore or neutralise such thoughts
- The person recognises that the thoughts are a product of his own mind
- (2) Repetitive behaviours or mental acts that the person feels driven to perform in response to an obsession
- The behaviours are aimed at reducing distress
- **B.** The obsessions or compulsions are excessive or unreasonable
- C. The obsessions cause marked distress and are time consuming
- D. If another axis 1 disorder is present the content of the obsession or compulsion is not restricted to it (eg food preoccupation in AN)
- E. The disturbance is not due to substance abuse or a general medical condition