**OVERVIEW OF ANXIETY DISORDERS- E - RESOURCE**

**Fear**- Emotional response to real or perceived imminent threat.

**Anxiety**- A vague unpleasant emotion that is experienced in anticipation of some future misfortune

Anxiety as a **normal adaptive function** ;

1.**Preparedness -** We are more likely to become anxious in response to cues that represent dangers e.g., snakes, strangers, storms etc thus helps in protection.**Fight-or Flight response** is a physiological reaction that occurs in response to perceived harmful stimuli and helps in survival.

2. **Performance i**mproves as a function of anxiety up to a threshold beyond which there is a fall off in performance

**Anxiety disorders**

-Extremes of normal anxiety

-Occur when normal anxiety system becomes dysregulated - excessive, inappropriate or deficient

-Impairment in performance, daily activities, socio-occupational dysfunction

Prevalence of anxiety disorders-4 to 8.8%

**Etiology:**

1. **Autonomic Nervous System-** Stimulation of the autonomic nervous system causes certain symptoms—cardiovascular (e.g., tachycardia), muscular (e.g., headache), gastrointestinal (e.g., diarrhea), and respiratory (e.g., tachypnea). The autonomic nervous systems of some patients with anxiety disorder, especially those with panic disorder, exhibit increased sympathetic tone, adapt slowly to repeated stimuli, and respond excessively to moderate stimuli.
2. **Neurotransmitter**-three major neurotransmitters associated with anxiety on the bases of animal studies and responses to drug treatment are norepinephrine (NE), serotonin, and γ-aminobutyric acid (GABA).
3. **HYPOTHALAMIC–PITUITARY–ADRENAL AXIS**. Consistent evidence indicates that many forms of psychological stress increase the synthesis and release of cortisol. Cortisol serves to mobilize and to replenish energy stores and contributes to increased arousal, vigilance, focused attention, and memory formation; inhibition of the growth and reproductive system; and containment of the immune response. Excessive and sustained cortisol secretion can have serious adverse effects, including hypertension, osteoporosis, immunosuppression, insulin resistance, dyslipidemia, dyscoagulation, and, ultimately, atherosclerosis and cardiovascular disease.
4. **Genetic Studies**. Genetic studies have produced solid evidence that at least some genetic component contributes to the development of anxiety disorders. Heredity has been recognized as a predisposing factor in the development of anxiety disorders. Almost half of all patients with panic disorder have at least one affected relative. The figures for other anxiety disorders, although not as high, also indicate a higher frequency of the illness in first-degree relatives of affected patients than in the relatives of nonaffected persons. Although adoption studies with anxiety disorders have not been reported, data from twin registries also support the hypothesis that anxiety disorders are at least partially genetically determined.
5. **Neuroanatomical Considerations**. The locus ceruleus and the raphe nuclei project primarily to the limbic system and the cerebral cortex. In combination with the data from brain imaging studies, these areas have become the focus of much hypothesisforming about the neuroanatomical substrates of anxiety disorders.
6. **Psychological theories and Defence mechanisms** underlying anxiety disorders help in better patient understanding.

**Common clinical presentation**

-Palpitations

-Numbness, tingling, breathlessness, choking sensation

-breathless, choking sensation

-chest pain or discomfort

-dizziness or feeling of unsteadiness

-sweating (cold clammy hands)

-trembling, shaking or tremors, fatigability

-sleeplessness, lightheadedness, fainting

-abdominal discomfort or pain in epigastric region, diarrohea

-excessive thirst, dryness of mouth, frequency of micturition

-Difficulty in concentration

-sleeplessness, intense fear or terror often associated with feeling of impending doom or losing control

-attacks last minutes, more rarely hours(panic attacks) or may be continuos(generalized anxiety )

Classification ICD- 10 of anxiety disorder

F40 Phobic anxiety disorders

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F40.0 Agoraphobia

F40.1 Social phobias

F40.2 Specific (isolated) phobias

F40.8 Other phobic anxiety disorders

F40.9 Phobic anxiety disorder, unspecified

F41 Other Anxiety Disorders

F41 Other anxiety disorders

F41.0 Panic disorder (episodic paroxysmal anxiety)

F41.1 Generalized anxiety disorder

F41.2 Mixed anxiety and depressive disorder

F41.3 Other mixed anxiety disorders

F41.8 Other specified anxiety disorders

F41.9 Anxiety disorder, unspecified

F42 Obsessive-Compulsive Disorder (OCD)

F42 Obsessive-compulsive disorder

F42.0 Predominantly obsessional thoughts or ruminations

F42.1 Predominantly compulsive acts (obsessional rituals)

F42.2 Mixed obsessional thoughts and acts

F42.8 Other obsessive-compulsive disorders

F42.9 Obsessive-compulsive disorder, unspecified

**Phobic disorders**

* In agoraphobia, social and specific phobias, anxiety is evoked predominantly by certain well-defined situations or objects, which are external to the individual and are not currently dangerous.
* As a result, these situations or objects are characteristically avoided or endured with dread.
* Phobic anxiety fluctuates from mild uneasy to terror. The individual’s concern may focus on individual symptoms such as palpitations or feeling faint and is often associated with secondary fears of dying, losing control, or going mad.
* The anxiety is not relieved by the knowledge that other people do not regard the situation in question as dangerous or threatening.

**Agoraphobia**

* Agoraphobia“ - the fear from marketplace.
* Agoraphobia includes various phobias embracing fears of leaving home: fears of entering shops, crowds, and public places, or of traveling alone in trains, buses, underground or planes.
* The lack of an immediately available exit is one of the key features of many agoraphobic situations.
* The avoidance behaviour causes sometimes that the sufferer becomes completely housebound.
* Most sufferers are women. Onset - early adult life.
* The lifetime prevalence - between 5—7%.
* High co-morbidity with panic disorder; depressive and obsessional symptoms and social phobias may be also present.

**Social Phobias**

* Clinical picture - fear of scrutiny by other people in comparatively small groups leading to avoidance of social situations
* The fears may be
  + discrete - restricted to eating in public, to be introduced to other people, to public speaking, or to encounters with the opposite sex
  + diffuse - social situations outside the family circle.
* Direct eye-to-eye confrontation may be stressful.
* Low self-esteem and fear of criticism.
* Symptoms may progress to panic attacks.
* Avoidance - almost complete social isolation.
* Usually start in childhood or adolescence.
* Estimation of lifetime prevalence - between 10-13 %.
* It is equally common in both sexes.
* Secondary alcoholism.

**Panic Disorder**

* The essential features are recurrent attacks of severe anxiety (panic attacks) which are not restricted to any particular situation or set of circumstances.
* Typical symptoms are palpitations, chest pain, choking sensations, dizziness, and feelings of unreality (depersonalisation or derealization).
* Individual attacks usually last for minutes only. The frequency of attacks varies substantially.
* Frequent and predictable panic attacks produce fear of being alone or going into public places.
* The afflicted persons used to think that they got a serious somatic disease.
* The course of panic disorder is long-lasting and is complicated with various comorbidities, in half of the cases with agoraphobia.
* The estimation of lifetime prevalence moves between 1-3%.

**General Anxiety Disorder**

* The essential feature is anxiety lasting more than 6 months, which is generalized and persistent but not restricted to, or even strongly predominating in, any particular environmental circumstances.
* Symptoms: continuous feelings of nervousness, trembling, muscular tension, sweating, lightheadedness, palpitations, dizziness, and epigastric discomfort.
* Fears that the patient or a relative will shortly become ill or have an accident are often expressed, together with a variety of other worries and forebodings.
* The estimation of lifetime prevalence moves between 4-6 %.
* This disorder is more common in women, and often related to chronic environmental stress.
* Its course uses to be fluctuating and chronic connected with symptoms of frustration, sadness and complicated with abuse of alcohol and other illicit drugs

**Mixed Anxiety and Depressive Disorder**

* Symptoms of both anxiety and depression are present, but neither of symptoms, considered separately, is sufficiently severe to justify a diagnosis of depressive episode or specific anxiety disorder.
* Some autonomic symptoms, such as tremor, palpitations, dry mouth, stomach churning, must be present.

**Obsessive-Compulsive Disorder (OCD)**

* Obsessional thought are ideas, images or impulses that enter the individual’s mind again and again in a stereotyped form.
* They are recognized as the individual’s own thoughts, even though they are involuntary and often repugnant. Common obsessions include fears of contamination, of harming other persons or sinning against God.
* Compulsions are repetitive, purposeful, and intentional behaviours or mental acts performed in response to obsessions or according to certain rule that must be applied rigidly. Compulsions are meant to neutralize or reduce discomfort or to prevent a dreaded event or situation.
* Autonomic anxiety symptoms are often present.
* There is very frequent comorbidity with depression (about 80%) - suicidal thoughts. Obsessive-compulsory symptoms may appear in early stages of schizophrenia.
* The life time prevalence: 2 - 3%. Equally common in men and women. The course is variable and more likely to be chronic.

**Case vignette**

A 40 years old muslim male graduate and banker by occupation resident of Gokulpuri came with the complaints of ghabrahat and pain all over the body since 1 month .The complaints started 1 month ago when he started experiencing ghabrahat associated with decreased appetite , loose stools , abdominal pain and decreased sleep .Complaints were aggravated subsequent to Delhi riots . Patient complaint of ‘ghabrahat’ and he remained worrisome throughout the day. He has developed fear that somebody might murder him .Also, he complaints of numbness , tingling sensation all over different parts of the body . At times he reports vague bodyaches localized to head and stomach , lower limbs at different intervals of time . These pain symptoms get relieved after 1 or 2 hrs after he engages himself in routine works.

He develops sudden attacks of anxiety lasting for 1 or 2 hrs which are accompanied by fear of impending doom , giddiness , palpitations , shortness of breath. These attacks get relieved by consuming medication which has been prescribed previously. On some days , he complains of developing diarrhea when he has more worrisome thoughts.

Apart from the present problems he has frequent repetitive irrational thoughts that ‘he would become mad. Patient is fully aware that these irrational thoughts are not correct but they continue to interfere when he’s doing his routine office job , as a result he started offering more prayers in order to undo these thoughts . He has been receiving medication from the psychiatry opd since past 8 months. In order to protect himself from the disturbed situation he shifted his residence to another neighbouring colony with family. Even after the settlement of the condition whenever the patient visits his house his worries increase disproportionately and feels palpitations and has repeated thoughts that some harm might happen to him. Apart from the visits to his native house he doesn’t experience any flashbacks or re-experiences the traumatic event that he witnessed . He is able to sleep comfortably with medication and is currently able to do his routine office job as well as manages household chores and interact socially with colleagues and family members .

**Negative history** -There is no history suggestive of any suicidal attempt, thoughts, hearing voices or seeing some images (history suggestive of psychosis ), no history suggestive of head injury ,seizures ,unconsciousness .

**Past history-** Patient was diagnosed as a case of obsessive compulsive disorder for which he received both pharmacological and non-pharmacological interventions in the year 2000. He was prescribed tablet Fluoxetine 40 mg/day which he took for period of 2 years with regular follow-up visits and the records did not mention any possible side effects

There is no history of drug abuse prior to 2000 .

His premorbid personality was well adjusted

**Family history –** There is no family history suggestive of any psychiatric or major medical illness.

**Personal history**

Early developmental history unremarkable. He completed his graduation and employed in a bank and has been promoted and is currently working. He got married 8 yrs back and has 2 children and has cordial marital relations.

General Physical examination- Patient has no pallor , icterus , clubbing, lymphadenopathy , cyanosis , thyromegaly or edema

PR- 82/min

BP- 128/78

Systemic examination – Respiratory , cardiovascular, per abdomen and CNS –No abnormality detected .

Mental state Examination Patient is cooperative , health seeking ,sitting comfortably on the chair , dressed appropriately , maintaining average personal hygiene , maintaining eye to eye contact ,rapport could be established . No abnormal involuntary movements noted.

Speech – Normal Tone ,volume, rhythm, productivity of speech ,talking relevantly and coherently

Mood – Subjectively says (Ghabrahat ), objectively- anxious

Thought – Preoccupations that occupy most of the time related to worries that something might happen to him / he may not survive .Such negative thoughts lead to palpitations , sensation of pins and needles , giddiness , vague bodyaches , nausea , frequent loose stools .

No perceptual abnormality.

General information and intelligence was above average

.Abstract thinking intact, judgement intact, Insight present .

Rating scale – A) Hamilton anxiety rating scale (HAM-A)- Symptoms of following were found :

1. Anxious mood -2
2. Tension -2
3. Fears- 3
4. Insomnia- 1
5. Intellectual- 1
6. Depressed mood-3
7. Somatic (motor)- 3
8. Somatic ( sensory )- 2
9. CVS – 1
10. Respiratory-0\
11. Gastrointestional -3
12. Genitourinary -1
13. Autonomic -1
14. Behaviour at the interview -1

Total score -24

B ) Y- BOCS Symptom Checklist (for both current and past)

1. Aggressive obsessions – fear will be responsible for something else terrible happening Is present currently , not reported in the past
2. Contamination obsessions – Concerned will get ill because of contaminant , concerned will get others ill by spreading contaminant ( aggressive ) Is present currently and reported in the past
3. Sexual obsessions – Nil
4. Hoarding / saving obsessions – Nil
5. Religious obsessions – Nil
6. Obsessions with the need for symmetry – Nil
7. Miscellaneous obsessions – Fear of not just saying the right thing

Prepare case discussion

1. Diagnostic formulation
2. Differential diagnosis
3. Management of mental disorder

a.Pharmacological intervention – Tab. Fluoxetine 40mg/day (after breakfast), Tab etizolam 0.5 mg twice a day, Tab pantoprazole 40mg once daily (empty stomach)

b. Non pharmacological intervention – Cognitive behavioural therapy

4. Management of comorbid medical condition

5. Followup assessment