Psychiatry
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Psychiatry

Definition
Psychiatry is that branch of medicine that deals with the study & treatment of disturbances of thinking, emotions & behavior. These symptoms may be secondary to functional or organic causes.

Classification of Psychiatric disorders:

1. Neurotic, stress related & somatoform disorders:
   A- Anxiety disorders:
       Generalized anxiety disorder (Persistant).
       Panic disorder (episodic).
       Phobic anxiety disorders.
   B- Stress related and adjustment disorders.
   C- Obsessive compulsive disorder.
   D- Dissociative conversion disorder (Hyste_ria)
   E- Somatoform disorder.
   F- Neuroasthenia

2. Affective (mood) disorders:
   - Depression.
   - Mania.

3. Psychotic disorders.
   - Schizophrenia.
   - Acute psychotic disorder.

4. Organic psychiatric disorders:
   - Acute e.g. delirium.
   - Chronic e.g. dementia.

5. Substance misuse:

6. Behavioural disorders:
   - Eating disorders.
   - Sleep disorders.
   - Sexual dysfunction.

7. Personality disorders.

Old classification:

<table>
<thead>
<tr>
<th>Neurosis</th>
<th>Psychosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which the patient may suffer &amp; finds difficulty in adjustment &amp; adaptation but in normal contact with reality</td>
<td>It is severe mental illness in which there are personality changes, impaired perception, disturbed thinking &amp; impaired insight.</td>
</tr>
<tr>
<td>1. Insight (present)</td>
<td>1-No insight</td>
</tr>
<tr>
<td>2. No deterioration of personality</td>
<td>2-Personality deterioration</td>
</tr>
<tr>
<td>3. In contact with reality</td>
<td>3-Loss of contact with reality</td>
</tr>
<tr>
<td>4. No or little disturbance in thinking</td>
<td>4-Disturbed thinking</td>
</tr>
<tr>
<td>5. No perceptual disorders.</td>
<td>5-Present e.g. hallucination</td>
</tr>
<tr>
<td>6. Intact orientation.</td>
<td>6-Lack of orientation</td>
</tr>
<tr>
<td>Examples; anxiety, obsessive compulsive disorder.</td>
<td>examples: schizophrenia</td>
</tr>
</tbody>
</table>
Neurotic, stress related and somatoform disorders

A. Anxiety disorder

1. Generalized Anxiety Disorder (GAD)

It is a subjective feeling of fear or apprehension without objective reasons usually accompanied by autonomic system hyperactivity & physical discomfort.

Prevalence, 5-6% of the population.

Anxiety is a normal emotion which in a moderate degree can be a helpful force by increasing effort & alertness. It is also protective function in the face of danger. It becomes pathological when symptoms are out of proportion to external circumstances or if persist long after a threatening situation. Also normal anxiety is less severe & of longer duration than pathological anxiety. Lastly normal anxiety improve performance but pathological anxiety decrease it.

Differential diagnosis:

- **Normal Anxiety** it is a universal feeling, see later.

- **Anxiety symptoms secondary to other psychiatric diseases**
  OCD, Mood disorders, substance related disorders. e.g. caffeine intoxication, alcohol and sedatives withdrawal, phobic disorders in which the anxiety is related to the phobic stimuli.

- **Anxiety secondary to medical diseases:**
  e.g. thyrotoxicosis, pheochromcytoma, mitral valve prolapse, hypoglycemia, angina, bronchial asthma, COPD.

Etiology:

1. **Heredity:** increase rate among twins.

2. **Learnt response:** child learn to respond excessively to stress. e.g. as threatening.

3. **Neurotransmitters dysregulation:** increase level of norepinephrine and serotonin and decrease level of GABA.

4. **Psychological basis:** A continuous conflict which pushes the individual beyond the last limit of adaptation.

5. **Personality:** obsessive personality are more liable!?
Clinical picture:

A- Psychological symptoms:
- Unexplained fears, apprehension, irritability.
- Insomnia, night mares.

B- Somatic manifestations:
CVS: Tachycardia. Lt mammary pain, systolic hypertension.
GIT: Nausea, vomiting, indigestion, diarrhea, anorexia, aerophagy.
Chest: Sighing, tightness, hyperventilation resulting sometimes in tetany & numbness (Hyperventilation syndrome)
Urogenital: Frequency, dysmenorrhea, impotence, premature ejaculation, sexual frigidity.
Nervous System: Headache, tremors, hyperreflexia.
Muscles: Pains due to muscular spasm.
Skin: Rashes, urticaria, & neurodermatitis

C- Cognitive manifestations:
- Lack of concentration
- Lack of remembering & recall
- Decreased ability to learn and ability to do ordinary work.

D- Psychosomatic illness:
- Bronchial asthma, CHD, ulcerative colitis, peptic ulcer.
- Psychosomatic illness usually occur with chronic anxiety.

2. Panic Disorder
- Recurrent attacks of intense fear or discomfort which are sudden & unpredictable
- They are not related to a particular situations
- They may lead to secondary agoraphobia i.e. fear of being in open spaces or outside the home.

Diagnostic C/P for panic disorder
(At Least 4 of the following features must be present during the attack)
- Shortness of breath
- Tachycardia
- Shaking
- Abdominal distress
- Parasthesias
- Chest pain
- Fear of dying
- Sweating

DD of panic disorder
- Pheochromocytoma
- Asthmatic attacks
- Hypoglycemia
- Myocardial infarction

Terror status:
Immobility characterizes this anxiety condition. Also there are tachycardia, sweating, palpation & trembling.
Investigations of anxiety disorders (GAD and panic):

1. **No specific test for anxiety.**
2. **Echocardiogram** may show mitral valve prolapse in good percent of patients of GAD.
3. **T3, T4, VMA, blood sugar, ECG:** to exclude medical condition.

Treatment of anxiety (GAD and panic):

1. **Psychotherapy:**
   To ventilate all his conflicts & through suggestion, reassurance & guidance getting him to overcome his anxiety, group psychotherapy may be used.

2. **Environmental & social manipulations:**
   to remove the patient from the disturbing factors.

3. **Slow breathing to reduce physical symptoms of anxiety:**
   - Breath in for 4 seconds & out for 4 seconds & pause for 4 seconds before breathing in again.
   - Practice 20 min at the morning or night.
   - It is used before & during situations that make you anxious.

4. **Drugs:**

   A) **Generalized anxiety disorders**

   **Benzodiazepines**
   - **Diazepam** 2-10 mg / 8 hr but should be reduced & tailed off after 3 weeks, otherwise dependence may occur.

   **Non benzodiazepines:**
   - **Buspirone** (Buspar) 5-10 mg bid.

   **Antidepressants** e.g. **amitriptyline** 10-100 mg at night.

   **SSRIs** e.g. **fluoxetine** (prozac) 20mg/d.

   **Propranolol (Inderal)** 30-60 mg / day controls autonomic manifestations.

   B) **Panic disorders**

   **Tricyclic anti-depressant**
   e.g. clomipramine (Anafranil 25 mg tab) 100-150 mg/D

   **Selective serotinine reuptake inhibitors (SSRIs)**
   - Fluoxetine (Prozac) 20 mg/D
   - Citalopram (Cipram) 20 mg/D
   - Sertraline (Lustural) 50 mg/D

   **Benzodiazepines**
   - Alprazolam (Xanax®) 0.25-0.5 mg/d

   **Non benzodiazepines** e.g. Buspirone (Buspar)

   **Beta-blockers** (Propranolol)
<table>
<thead>
<tr>
<th>Normal anxiety</th>
<th>GAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Stressful life events</td>
<td>- No external cause</td>
</tr>
<tr>
<td>- Less severe-shorter duration</td>
<td>- More severe, longer duration</td>
</tr>
<tr>
<td>- Constructive and improves performance</td>
<td>- Destructive and deteriorates performance</td>
</tr>
<tr>
<td>- No need for treatment</td>
<td>- Treatment is important</td>
</tr>
</tbody>
</table>

**Thyrotoxicosis and anxiety disorders**

<table>
<thead>
<tr>
<th>Thyrotoxicosis</th>
<th>Anxiety or Panic</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Warm sweating on the palm and dorsum of the hand</td>
<td>- Cold sweating on the palm only</td>
</tr>
<tr>
<td>- Hot hands</td>
<td>- Cold hands</td>
</tr>
<tr>
<td>- Sleeping pulse is high</td>
<td>- Sleeping pulse is normal</td>
</tr>
<tr>
<td>- Thyroid functions show increased T3 &amp; T4</td>
<td>- Normal thyroid function test</td>
</tr>
<tr>
<td>- Associated symptoms as ophthalmopathy</td>
<td>- Absent</td>
</tr>
</tbody>
</table>

**Pheochromocytoma and anxiety**

<table>
<thead>
<tr>
<th>Pheochromocytoma</th>
<th>Anxiety or Panic</th>
</tr>
</thead>
<tbody>
<tr>
<td>- No sense of apprehension</td>
<td>- Sense of apprehension</td>
</tr>
<tr>
<td>- In attacks</td>
<td>- Usually present most of the time</td>
</tr>
<tr>
<td>- ↑ VMA in urine</td>
<td>- ¬ve</td>
</tr>
<tr>
<td>- ↑ CA in blood</td>
<td>- ¬ve</td>
</tr>
</tbody>
</table>

**Mitrval valve prolapse and anxiety**

<table>
<thead>
<tr>
<th>Mitrval valve prolapse</th>
<th>Anxiety or Panic</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Tachycardia</td>
<td>- Tachycardia</td>
</tr>
<tr>
<td>- Choking</td>
<td>- Difficulty in breathing</td>
</tr>
<tr>
<td>- Chest pain</td>
<td>- Chest tightness</td>
</tr>
<tr>
<td>- Manifestations occur in attacks</td>
<td>- Occur most of the time</td>
</tr>
<tr>
<td>- Click murmur on the heart</td>
<td>- ¬ve</td>
</tr>
<tr>
<td>- Echo +ve finding</td>
<td>- ¬ve</td>
</tr>
</tbody>
</table>

**Hypoglycemia and Anxiety disorder**

<table>
<thead>
<tr>
<th>Hypoglycemia</th>
<th>Anxiety or Panic</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Excessive sweating</td>
<td>- Sweating</td>
</tr>
<tr>
<td>- Improved by glucose intake</td>
<td>- Not improved by glucose intake</td>
</tr>
<tr>
<td>- Decreased blood sugar level</td>
<td>- Normal blood sugar level</td>
</tr>
<tr>
<td>- History of DM, use of hypoglycemic drugs or insulin</td>
<td>- History of psychological troubles</td>
</tr>
</tbody>
</table>
Myocardial infarction and panic disorder

<table>
<thead>
<tr>
<th>Myocardial infarction</th>
<th>Panic disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Chest pain is compressing and may</td>
<td>- Left mammary stitching pain</td>
</tr>
<tr>
<td>radiate to shoulder</td>
<td>- Sense of impending death or</td>
</tr>
<tr>
<td>- Sense of impending death</td>
<td>becoming mad</td>
</tr>
<tr>
<td>- Serum enzymes as CK, SGOT, and LDH</td>
<td>- Serum enzymes are normal</td>
</tr>
<tr>
<td>are increased</td>
<td></td>
</tr>
</tbody>
</table>

3. Phobic Reaction

It is a special form of fear of specific object or situation which is characterized by:
- It is out of proportion to the demands of the situation.
- It can't be explained or reasoned.
- It is beyond voluntary control with avoidance (behavioral) of the feared situation.
- Autonomic manifestations on exposure to the object.

Differential Diagnosis:
- Normal fears e.g. fear of snakes, dogs.
- Phobic symptoms associated with obsessive compulsive disorders (OCD), schizophrenia.
- Panic disorder (associated with agoraphobia).
- Temporal lobe epilepsy (Fears during the attacks followed by amnesia).

Types:
- Agoraphobia fears of (Open spaces)
- Claustrophobia fears of (Closed spaces)
- Acrophobia fears of (heights)
- Social phobias (in which the affected person is exposed to the gaze of others or talk in front of people, it is common in childhood or adolescence).
- Animal phobias (zoophobia).
- Illness phobias (nosophobia) e.g. cancer.
- Obsessive phobias (see OCD).
- Xanatophobia: fear of death.

TIP:

Psychotherapy: may be effective.

Behavior therapy: (it is the best treatment of phobias)
- **Systemic desensitization**: (gradual exposure to the source of phobia)
  The patient is exposed to feared object or situation in gradually increasing intensity with using relaxation techniques or anxiolytics.
- **Implosive therapy (Flooding)**
  The patient is exposed to the most intensively phobic situations for up to one hour.

Drug therapy: TCA, SSRIs, BZD, non BZD, Inderal (See before)
B. Stress related and adjustment disorders

These disorders are produced by stressful events (reaction to severe stress).

**Classification:**
- Acute stress reaction
- Adjustment disorder.
- Post traumatic stress disorder.

I. **Acute stress reaction:**
Following a stressful event e.g. diagnosis of cancer, HIV or major accident. It includes anxiety, anger, depression, night mares, reduced sleep. It resolves within days to few weeks. Treated by sedatives and reassurance.

II. **Adjustment disorder:**
Following moderate stressful event e.g. migration, separation, grief reaction following bereavement, the symptoms are sadness, loss of interest, sleep disturbance, irritability. The symptoms do not exceed 6 months. Pathological grief is abnormally intense or persistent, it is treated by reassurance, support, ongoing contact with others, antidepressants and anxiolytics.

III. **Posttraumatic stress disorders:**
*i.e. Anxiety produced by extraordinary major life stress, it is considered to be a reaction to severe stress.*

**Diagnostic Criteria of Post traumatic stress disorders:**
1- The person has experienced an event that is outside the range of usual human experience e.g. seeing another person seriously killed or injured, sudden destruction of one's home, rape, war or natural catastrophe.

2- The traumatic event is persistently re-experienced in the form of dreams or flash back episodes. Or distress at exposure to events that resemble the traumatic event.

3- Persistent avoidance of thoughts feeling associated with the trauma

**Treatment:**
- Psychotherapy and ventilation.
- Antidepressants and or anxiolytics.
C. Obsessive compulsive disorders (OCD)

This is a neurotic illness ch.ch. by:

- Periodic or persistent subjective experience of a certain thought or action the patient realize that it is silly & illogic (absurd ideas)
- Continuous, attempts to resist it, (uncontrolled) so it is like compulsion so there is associated anxiety or depression.
- This disease may occur commonly in compulsive personalities!
- The prevalence is 1-3% but many people do not request treatment.

Etiology:

- Genetic: The disease is found in 5-7% of the first degree relatives and 80-90% in monozygotic twins.
- Personality (Compulsive personality = premorbid trait) associated with poor prognosis.
- Physiological: Dysregulation of serotonin neurotransmission
  - Basal ganglia dysfunction.

Clinical Picture:

A) Obsessions

1- Ideas, Images:

which are very silly & absurd comes to the patient's mind e.g:

- Ideas: which associates the name "god" with absurd words
- Images: sexual intercourse with his mother.

2- Impulses

Eidifā'āt

are often of a suicidal or aggressive nature e.g.

- To push his friend
- To throw himself under a bus
- Laugh in the mosque or church.

3- Phobias.

The phobias are related to impulses, the patient avoid things or situations which are the sources of his impulses e.g.:

- Phobias of kissing children if the impulses is to have sexual, relation with children.
- Phobia of going to mosques or even to pray if the impulses is to sing while praying.

4- Ruminations:

- The patient ask himself questions & does not reach to a conclusion e.g. where is god, why my nose is over my mouth.
B) Compulsions

The patient must follow a certain routines in his life as in: dressing, in washing, in writing e.g. he is compelled to wash his hands repeatedly after contact with certain things, checking or arranging.

These obsessional motor acts alleviate his anxiety.

Treatment:

Psychotherapy is necessary.

Behavioral therapy.

Repeated exposure to the contaminated objects followed by prevention of the response of the patient. Some patients are helped if they can observe a therapist behavior in presence of contamination.

Drugs:

- Clomipramine 150-300 mg/d (Anafranil) which is a tricyclic antidepressant

- One of the SSRI group (selective serotonin reuptake inhibitors) e.g. prozac, cipram tab 20 mg tab (1-2 tab/D)
  or Lustral, faverin 50 mg tab (1-2 tab/d)

- Benzodiazepines. e.g. Alprazolam (Xanax) 0.25-0.5 mg tab, 1-2 tab/day.
**D. Conversion & Dissociative Reactions (Hysteria)**

**Definition:**
It is a subconscious production of signs & symptoms to gain attention or to escape from a certain danger or threat (secondary gain), the symptoms usually have a symbolic meaning. There is also a primary gain to relieve anxiety.

*Hysteria comes from the Latin word Hysteron* meaning the uterus, it was previously thought that the condition occurs only in females due to certain uterine movements, but it occurs both in females & males.

*Dissociative conversion disorders has replaced* this previously used term, but many clinicians still prefer to retain hysteria as a diagnostic category.

**Etiology:**
1. **Heredity Genetic factors:** may play a role especially in a personality disorder called histrionic personality!? (see later).
2. **Emotional stress, conflict** which may lead to conversion or dissociative reaction.
3. **Conversion and dissociative disorders may occur in all social classes** but it is commoner in noneducated people of below average intelligence.

**Clinical Picture:**
1- **Conversion reaction:** (unresolved conflict could be converted into symbolic physical symptoms)

**1- Motor Disturbances:**
- Paralysis:
  - In the form of monoplegia, hemiplegia, or paraplegia.
  - In comparison to organic hemiplegia proximal>distal, no clonus, no babiniski, no specific distribution.
- Aphonia: the patient can not phonate words but continues to cough as the vocal cords are not affected.
- Tics, tremors, coma, stupor with no abnormal or specific signs.
- Torticollis.
- Fits:
  - No sequence of tonic then clonic movements.
  - Occur in presence of audience.
  - Never occur during sleep.
  - No cyanosis, incontinence or tongue biting.
  - There is resistance to interference.
All motor symptoms have a symbolic meaning e.g. Aphonia as she cannot express her feeling, torticollis as she does not want to look at her husband who sleeps beside her.

2- Sensory disturbances:
   - Anesthesia: frequently total with no specific distribution.
   - Blindness: reactive pupil, patient avoid objects that would injure him
   - Pain bizarre: related to emotional conflicts.

3- Visceral disturbance:
   Vomiting, cough, hicough, pseudocyesis, globus hystericus.

II- Dissociative Reactions: (Loss of awareness or cognitive ability without medical explanation)

   The personality is dissociated to escape from the suffering.

1. Amnesia:
   (usually circumscribed or patchy) e.g. forgetting a shameful situations.

2. Fugues:
   The patient may travel over long distance, the patient is unaware of his original life, he may forget everything that happened during the attack.

3. Sleep walking:
   The patient awakes from sleep, performs certain activities then return to sleep with amnesia about this period. Common in children due to stresses e.g. (School-parents disharmony)

4. Double or multiple personalities:
   The patient acquires another personality through which he can behave in the way he likes then return back to his original personality with amnesia about the events that occurred. The acquired personality motivated by her subconscious desires.

5. Stupor & twilight:
   State of clouding of consciousness during which patient may stop all physical & mental activities. It may be an escape from psychological trauma.

6. Ganser's syndrome (Hysterical pseudomentia):
   Occurs under severe stress as in prisoners; there is a childish, bizarre behavior; an educated patient may be unable to know the number of fingers.

Differential Diagnosis: Exclude organic brain disease
- Organic disorders of the brain
- Functional psychosis.
- Mental retardation.
- Neurological diseases.

Q: Dissociative amnesia: this include
- Amnesia
- Fugues.
- Pseudodementia
TNT: At first exclude organic causes
(The treatment is mainly psychotherapy and social support)

**General rules:**
- Solve his problem & regain normal adjustment.
- Try to keep patient at work.
- Marriage or divorce are not recommended as a ttt.

**Psychological ttt:**
- **Suggestion** by ordinary psychotherapy
- **Supportive psychotherapy** to regain maturity in dealing with stressful situations.
- **Abreaction to explore psychopathology** (By IV injection of small dose of amytal or midazolam).
- **Extracephalic electrical stimulation** for suggestion to induce movements in paralyzed muscles, regain voice in aphony.
- **Production of pain** e.g. ethyl chloride spray intranasal !?.

**How can you differentiate between hysterical fits and epileptic fits?**

<table>
<thead>
<tr>
<th>Hysterical fits</th>
<th>Epileptic fits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occur in front of audience</td>
<td>Occur at any time</td>
</tr>
<tr>
<td>Rarely hurt themselves</td>
<td>Usually injure themselves</td>
</tr>
<tr>
<td>May be either tonic or clonic</td>
<td>Tonic then clonic</td>
</tr>
<tr>
<td>Do not occur during sleep</td>
<td>Can occur during sleep</td>
</tr>
<tr>
<td>Absence of incontinence, cyanosis, biting of the tongue</td>
<td>Cyanosis, incontinence, and tongue biting occur</td>
</tr>
<tr>
<td>Attempts to pull their hair or tear their cloths</td>
<td>Absent</td>
</tr>
</tbody>
</table>

**How can you differentiate between organic and hysterical hemiplegia?**

<table>
<thead>
<tr>
<th>Hysterical hemiplegia</th>
<th>Organic hemiplegia</th>
</tr>
</thead>
<tbody>
<tr>
<td>No signs of pyramidal lesion</td>
<td>Positive</td>
</tr>
<tr>
<td>Proximal weakness is more</td>
<td>Distal weakness is more</td>
</tr>
<tr>
<td>Flexor plantar response</td>
<td>Extensor plantar response</td>
</tr>
<tr>
<td>No cranial nerve affection</td>
<td>Cranial nerves may be affected</td>
</tr>
</tbody>
</table>

**How can you differentiate between hysterical coma and hypoglycemic coma?**

<table>
<thead>
<tr>
<th>Hysterical coma</th>
<th>Hypoglycemic coma</th>
</tr>
</thead>
<tbody>
<tr>
<td>In front of audience</td>
<td>Anywhere</td>
</tr>
<tr>
<td>No sweating</td>
<td>Sweating, tachycardia, pallor</td>
</tr>
<tr>
<td>No convulsions</td>
<td>Convulsions may occur</td>
</tr>
<tr>
<td>No effect of IV glucose</td>
<td>Good response to IV glucose</td>
</tr>
<tr>
<td>History of stress or psychological problem</td>
<td>History of fasting or hypoglycemic drug overdose</td>
</tr>
</tbody>
</table>

**How can you differentiate between Psychogenic amnesia and Amnesia due to organic condition?**

<table>
<thead>
<tr>
<th>Psychogenic amnesia</th>
<th>Amnesia due to other conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden loss of memory usually precipitated by emotional trauma</td>
<td>1. <strong>Organic</strong>: Not related to stress</td>
</tr>
<tr>
<td>It is usually circumscribed amnesia in which the events of a short period of time are lost</td>
<td>- More common in elderly</td>
</tr>
<tr>
<td>Mild clouding of consciousness may occur in some cases</td>
<td>- Full return of memory is rare and very gradual</td>
</tr>
</tbody>
</table>

2. **Malingering**: Conscious attempt to fake loss of memory for secondary gain.
E. Somatoform Disorders

- This group of disorders are characterized by repeated medical consultation for physical symptoms which have no adequate physical bases.
- In most cases a psychiatric assessment will show that the physical symptoms bear a close relationship with stressful life events or emotional conflicts.

Presentations:

1- Somatisation disorder:
   • More in females
   • Usually chronic & fluctuating course over many years,
   • Symptoms may be referred to any part of the body.
   • Anxiety or depression may be present
   • Unhelpful operations e.g. hystectomy & cholecystectomy are common.

   Examples:
   - headache  - nausea
   - dizziness  - sexual dysfunction
   - vomiting   - menstrual irregularity.

2- Hypochondrial disorders:
   • It is a morbid preoccupation with the possibility of having a serious illness.
   • Hypochondrial symptoms commonly occur in anxiety & depressive disorders but occasionally they are primary & persistent for many years.

   Examples:
   - Delusional parasitosis → consult dermatologist.
   - Dysmorphobia → requests for cosmetic surgery.

3- Somatoform autonomic dysfunction:
   • Symptoms are referred to organs which are under autonomic control.

   Examples:
   - Cardiac neurosis.
   - Psychogenic hyperventilation
   - Psychogenic vomiting.
   - I.B.D.

4- Somatoform pain disorder:
   • The common presentation is severe persistent pain, which can not be explained by a physical illness or physiological disturbance.
   • Emotional conflicts or psychological problems are evident.

Differential diagnosis of somatoform disorders:
1. Organic disorders
2. Psychiatric illness
3. Factitious disorders
4. Malingering
5. Conversion reaction

Management of somatoform disorders:

**Organic disorders must be excluded.**
- Most cases are chronic & complete recovery must not be expected
- Psychotherapy.
- Antidepressant and anxiolytics may be helpful.

**Unexplained Somatic Symptoms**
- i.e. Somatic symptoms not due to medical causes.

**Differential diagnosis**
1. Anxiety disorders.
2. Panic.
3. Depression.
4. Conversion disorder.
5. Somatoform:
   - Somatisation.
   - Hypochondriasis.
   - Psychogenic pain disorder.
6. Secondary to psychosis
7. Neurasthenia.
8. Malingering.

<table>
<thead>
<tr>
<th>Factitious Disorders</th>
<th>Malingering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary inducing physical symptoms.</td>
<td>No mental disorder</td>
</tr>
<tr>
<td>Multiple hospitalization</td>
<td>Voluntary production of false physical or psychological symptoms to avoid:</td>
</tr>
<tr>
<td>Multiple operations</td>
<td>* Military service</td>
</tr>
<tr>
<td>Severe acute symptoms, e.g. abdominal pain and bleeding tendencies</td>
<td>* Severe distress at work</td>
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<td>Abuse of analgesics and sedatives</td>
<td>Resisting examination</td>
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<tr>
<td>Demanding examination</td>
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<td>Usually called thick file syndrome.</td>
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</table>
F. Neurothenia (Chronic Fatigue Syndrome)

- Neurothenia is characterized by excessive fatigue after minimal physical or mental exertion, poor concentration, dizziness, muscular pains and sleep disturbance.
- It is not secondary to medical or psychiatric diseases, it may follow physical illness or infection.
- Symptoms overlap with depression and anxiety.
- It is treated by:
  - Sulbutiamine (Arcalion) 200mg tab, 2 tab after breakfast.
  - SSRIs.
  - Cognitive behaviour therapy (CBT)

Chronic Tiredness

**Common Symptoms:**

Compared with previous level of energy

- Tired all the time  - Tired despite rest
- Tired easily

**This leads to**

- disruption of work, social & family life
- affects ability to carry routine & other tasks.
- Feelings of frustration.
Common triggers:

1. Psychological triggers:
   - Depression
   - Anxiety / stress
   - Worry
   - Doing too much
   - Doing too little

2. Physical triggers:

   **Medical problems**
   - Anemia
   - Asthma
   - Diabetes
   - Sleep apnea
   - Narcolepsy
   - Thyroid disorder
   - Influenza
   - Alcohol/drug use
   - Bacterial or viral infection
   - Chronic liver disease
   - Renal impairment
   - Addison's disease

   **Medications:** → steroids, antihistaminics, Beta blockers

Treatment:

**Supportive therapy (most often needed):**
   - Depression
   - Worry
   - Stress/life problems
   - lifestyle change
   - level of physical activity.

**Medication for:**
   - Other mental or physical disorders
   - Certain anti-depressants are sometimes useful. (Tryptizole 10 mg, anafranil 25 mg)
   - There are no effective medications specific to fatigue.
   - Specific medications for medical problems.

**Behavioral strategies:**
   - Have a brief rest period about 2 weeks, in which there are no extensive activities.
   - After periods of brief rest, gradually return to your usual activities.
   - Plan pleasant / enjoyable activities into your week.
   - Gradually build up a regular exercise routine.
   - Do not push yourself too hard, remember build up activities gradually & steadily.
   - Try to have regular meals during the day.
   - Try to keep to a healthy diet.
   - Use relaxation techniques, for example, slow breathing (see before).
Mood disorders

Classification of mood disorders:
1. Manic depressive disorders:
   a. Unipolar major depression
   b. Bipolar manic depressive disorders
2. Dysthmia, cyclothymia
3. Mood disorders secondary to
   - Medical condition
   - Other psychiatric disorders
   - Substance or drug induced

Etiology:
1. Heredity: mood disorders run in families, especially bipolar disorders.
4. Medical problems: pre-menstrual, myxedema, cortisone therapy, cushing, encephalitis, pneumonia, vital hepatitis, pills, reserpine, electrolyte disturbances.
5. Chemical: decreased biogenic amines (norepinephrine, serotonin, dopamine) in depression, & increased in mania.

General Ch.Ch. of manic depressive disorders:
- Primary disturbance of mood, this may vary between cheerfulness (Mania) & sadness (depression), the patient may have unipolar cyclic depression or bipolar manic depressive disorder.
- Periodicity, elevation or depression of mood alternate with free interval.

Clinical Features of manic depressive disorders:

I- The depression phase or depressive episode (major depression)
(Female: male is 2:1)
A- Mood changes
   Ch.Ch. by diurnal variations, there is hopelessness, no aim, no desire to live (Suicidal tendency), bad look to future.
B- Psychological changes:
   1. Thought changes: Slow thinking, lack of concentration, self depreciation, psychotic symptoms of depression e.g. Delusions e.g. nihilistic (sense of death of systems or organs), delusions of poverty, guilt feeling or delusion of guilt.
   2. Hallucinations: uncommon, auditory, or visual.
C - Behavior changes:
Slow movements, sad faces, neglect personal hygiene, social withdrawal, suicidal attempts, psychomotor manifestation e.g. retardation, stupor, agitation with overactivity.

D - Physiological changes (Somatic symptoms):
Insomnia, anorexia, constipation, loss of sexual desire, headache, backache and weight loss.

E - Cognitive changes:
- Poor concentration, slow thinking.
- Negative view of the self (self depreciation)
- Negative view of the future (hopelessness)

II - Phase of hypomania & mania
hypomania is less & milder in quality than mania
- Hyperactivity which may rarely lead to real achievement
- Joyful activity, hypertalkativeness, dressing in bright colors and excessive cosmetics, flights of ideas
- The mood is elated, self confident, delusion of grandiosity, power, and religious significance.
- Insomnia, strong sexual urge, polyphagia, excessive drinking.

Differential diagnosis:
1- Organic psychosis
2- Schizophrenia.
3- Other diseases e.g. alcoholism, myxedema, cushing disease.
4- Personality disorders.

Depression may mask itself as another illness, i.e. it may be caused by another illness or may be concomitant with another illness or it may be a result of treatment of another illness.

Medical Causes of Depression:
- Pharmacologic: steroids, methyl dopa, cimetidine, reserpine, cyclosporine, amphetamine withdrawal, contraceptives, propranolol.
- Infectious diseases: Influenza, viral hepatitis, IMN, T.B, HIV.
- Endocrinal: Hypothyroidism, Cushing & Addisson’s disease, postpartum, menses related, D.M. Hypoparathyroidism and hyperparathyroidism
- Collagen: SLE, Rheumatoid.
- Neurological: parkinsonism, stroke, multiple sclerosis.
- Nutritional: Vit B12, B1, B2, B6, Vit C, Folate and Niacin deficiency.
- Neoplastic: Cancer head pancreas, disseminated malignancy
### Diagnostic criteria for major depressive episode:

- Depressed mood.
- Agitation or retardation
- Guilt feelings
- Diminished ability to think or to concentrate
- Significant weight loss
- Fatigue
- Thoughts of death
- Diminished interest or pleasure.

*(at least 5 of the above symptoms must be present for at least 2 weeks)*

### Diagnostic criteria for manic episode:

- **a- Elevated or irritable mood**
- **b- During the period of mood disturbance 3 of the following must to present:**
  - Self grandiosity.
  - Talkative
  - Decrease the need for sleep
  - Flight of ideas
- **c- Marked impairment in occupational functioning or in usual social activities**

*(Manic syndrome=a+b+c) (Hypomanic syndrome=a+b only.)*

### Treatment:

#### 1. Hospitalization

In cases of depression with severe suicidal thoughts, rich delusions, guilt feeling, refusal of food, or severe agitation or retardation, also in severe cases of mania.

#### 2. Supportive psychotherapy

For explanation & reassurance.

#### 3. Drug therapy:

**A- For depression:**

Antidepressants, they increase the level of the 5HT, NA, DA in the brain

- **i. Tricyclic antidepressants:**
  
  (prevent reuptake of neurotransmitters e.g. NA, 5HT, DA)
  
  - **Stimulants** e.g. imipramine *(tofranil)* 75-200 mg/d given in retarded depression with less psychomotor activity.
  
  - **Sedative** e.g. amitriptyline *(tryptizol)* 75-200 mg/d, Anafranil 75-200 mg/d indicated in agitated, anxious depression.

- **ii. Selective serotonin reuptake inhibitors:**
  
  Fluoxetine *(prozac)* 20mg or citalopram *(cipram)* 20mg/d,
The antidepressants will start their maximum effect within 2-3 weeks & maintenance should continue for 6-8 months to guard against relapse.

**B-For Mania:**

i. **Phenothiazines:**
   - eg: chlorpromazine 100-800 mg/d, Sparine 300-800 mg/d for hyperactivity & insomnia.

ii. **Butyrophenones:** e.g. Haloperidol (safinace) 5 mg tab 10-20 mg/d.

iii. **Atypical antipsychotics,** e.g. olanzapine (zyprexa) 10-20 mg/d

**Mood stabilizers**

**Lithium:**
- It is a prophylactic agent in recurrent mania or bipolar manic-depressive.
- Lithium carbonate (priadel) 400 mg tab 2 tab/d with regular measurement of serum level as it is nephrotoxic & may alter thyroid function
- We can use lithium during the attack of mania

ii. **Carbamazepine (tegretol):**
   - 400 – 1200 mg/d, recently used as an alternative prophylaxis for patients who do not respond to lithium.

iii. **Sodium valproate (Depakine) 500-1500m/d.**

| The mood stabilizers must be used for at least 2 years. |

**4. ECT:**

A) Depression in the following conditions.
   - Suicidal thoughts or attempts
   - Indicated in severely retarded, agitated patients & do not wait for drugs to act within 3 weeks.

B) Acute manic episode.
   - Depression and mania usually need 8-12 times spaced twice or thrice weekly.

**Other mood disorders**

1) **Dysthymia**
   - It is a chronic depression not fulfilling criteria for major depression
   - Depressed mood and irritability
   - Sleep and appetite are increased or decreased
   - Decreased concentration and fatigue
   - No organic or other psychiatric disorders
   - **ITT:** - Antidepressents - Antianxiety - Psychotherapy
2) Cyclothymia

- Mood swings with persistent mood instability
- There are periods of hypomania and depression
- **TIT**: Mood stabilizers
- Psychotherapy

Dysthymia and cyclothymia are called minor persistent mood disorders.

3) Mood disorders due to medical diseases

- **Depression** (See before)
- **Mania**: Brain tumors
  - Endocrinal (hyperthyroidism)

4) Substance induced mood disorders (See before):

- **Depression**: Sedatives, CCP, steroids & methyl dopa, Inderal, benzodiazepines
- **Mania**: steroid - amphetamines – hallucinogens

5) Mood disorders 2ry to another psychiatric disorder

- Anxiety
- OCP
- Alcoholism
- Schizophrenia
- Drug dependence

**Mixed anxiety depression disorder !?**

- Anxiety symptoms + dysphoria.
- DD are anxiety, mood disorder.
- It is treated by :
  - Supportive psychotherapy.
  - Environmental and social manipulations.
  - Relaxation techniques.
  - TCA e.g. amitriptyline (tryptizol).
  - SSRI
  - BDZ
  - Propranolol
Psychotic disorders

I. Schizophrenia

This is the severest form of functional mental illness, complete recovery may occur either spontaneously or with treatment.

Definition:

Psychiatric disease characterized by disturbances of thinking, emotion, volition, perception & behavior with withdrawal from reality.

Prevalence: 1% of the population

Age: more between 15-30 yrs   Sex: Almost equal

Etiology:

2. Personality: May occur in any personality but schizoid personality gives the poorest prognosis.
3. Biochemical: Disturbance in the central C.A. synapses mainly as overactivity of dopamine receptors which should explain the psychotic action of dopamine agonist drugs & the anti-schizophrenic action of phenothiazines.
4. Psychosocial: E.g. overprotective mother or submissive father or excessive critical comments.
5. Slow virus infection may be present.
6. Predisposing stresses: E.g. physical illness, steroids, operations, drug abuse, puerperium may trigger the illness.

Symptomatology:

1- Disorder of thought (thinking)

- **Formal thought disorder.**
  - There is loss of association (Incoherence)
  - Incomprehensible speech
  - Lack of abstraction (لا يعرف معنى الأسئلة الشعبية)
- **Disturbance of thought control:**
  - Thought reading
  - Thought withdrawal
  - Thought insertion
  - Thought broadcasting
- **Disturbance of stream**
  - Thought retardation
  - Thought block

- اضطرابات التفكير
  - اضطرابات شكل التفكير
  - اضطرابات مجرى التفكير
  - توقف تفكير المريض فجأة و الحديث عند سماحة
**Disturbance of content**  

**Delusions:** False fixed beliefs not related to the educational & social background of the patient, also cannot be corrected by reassurance

- Grandiosity delusion
- Delusions of infidelity or jealousy
- Delusions of reference
- Persecutory delusions
- Delusions of influence

**2- Disorder of emotion:**

- Flat emotions
- Inappropriate emotion
- Depressive or euphoric emotion
- Prostitution, addiction, with indifference.

**3- Disorder of volition:**

- There is loss of well power, lassitude with hesitation & inability to make decision.
- Marked loss of self-care & hygiene. Lack of drive and ambition

**4- Disorder of behavior:**

- Withdrawal, self-negligence & sometimes suicidal behavior. Violence or excitement may occur.
- Catatonic symptoms e.g. maintained posturing for long time, catatonic excitement or stupor (no response to environment).

**5- Disorder of perception:**

**Hallucinations** i.e. sensory perception without stimulus

- Tactile  
- Visual  
- Olfactory  
- Auditory (common)  

**Illusions** i.e. misinterpretation of a real stimulus

Auditory Hallucinations in the form of voices discussing the patient in the third person, also voices keeping up a running commentary on the patient thoughts or actions. Also it may occur in the form of threatening

**6- Catatonic manifestations**

- Abnormality of movement, ranges from over-activity or excitement to marked immobilization & retardation.
- Also automatic obedience – maintain posturing, waxy flexibility.

**7- Mood disorders**

**8- Negative symptoms:**

- Apathy, social withdrawal
- Blunting of affect
- Poverty of thought
9-Cognitive symptoms:
- Lack of concentration and attention with poor memory.

Types Of Schizophrenia:

1-Simple Schizophrenia
- This can be missed for many years, the onset is slow, symptoms are mainly flat affect, lack of volition, withdrawal & failure at work or study. They are emotionally flat but there are no delusions or hallucinations, they may end in addiction, crime & prostitution. (So it is mainly disturbance of volition & emotion)

2-Hebephrenic schizophrenia: (disorganized)
- Occurs at early age, all types of disorders are present. Delusions & hallucinations may occur. Bizarre behaviour (childish, silly)

3-Catatonic schizophrenia:
- **Excited catatonia:** Motor activity with aggression, excitement. The patient may destroy everything around him.
- **Inhibited type:** e.g. immobility, stupor, negativism.

4-Paranoid schizophrenia:
- Mainly hallucinations (auditory) & delusions e.g. (persecutory, jealousy). It does not lead to marked personality deteriorations. older age

5-Undifferentiated:
- when the symptoms are not belong to any other type or mixed criteria from different subtypes are present.

6-Residual schizophrenia: (mainly -ve symptoms)
- Chronic residual cases with traces of thought & emotional disorders
  - The acute phase of schizophrenia usually presented by positive symptoms e.g. Delusions, hallucinations, disorder of thinking & speech (good response to neuroleptics
  - The chronic phase usually presented by negative symptoms (poor neuroleptic response)

Differential Diagnosis of Schizophrenia:

1- Organic psychosis
  a) Brain disease e.g. frontal lobe tumors, epilepsy, encephalitis, Alzheimer.
  b) Systemic diseases affecting brain e.g. hepatic encephalopathy, cushing disease.

2- Chemical toxicity e.g. LSD, hashish → hallucination.

3- Drugs → cytotoxic drugs, steroids.

4- Affective disorders (mood disorders), which are ch.ch by periodicity
5- Post partum psychosis

**Diagnostic criteria:**

a- Presence of characteristic psychotic symptoms e.g. delusions, hallucinations.
b- Functioning in work, social relations, self care are markedly decreased.
c- Mood disorders must be ruled out.
d- Duration of illness at least 6 months.
e- No organic factor.

<table>
<thead>
<tr>
<th><strong>Prognostic Factors in schizophrenia</strong></th>
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<tbody>
<tr>
<td><strong>Good Prognostic factors:</strong></td>
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<tr>
<td>Acute onset</td>
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<tr>
<td>Obvious ppt factor</td>
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<tr>
<td>Affective symptoms</td>
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<td>-ve F.H.</td>
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<tr>
<td>Normal premorbid personality</td>
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<tr>
<td>Catatonic symptoms</td>
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</table>

**Prognosis:**

- 15% full recovery with no relapse
- 50% recovery completely with repeated relapses
- 25% persistent positive & negative symptoms.
- 10% die by suicide

**Treatment:**

1-**Hospitalization:**

When there is danger to self or others e.g. Excitement, catatonic or suicidal behaviour.

2-**Genetic counselling.**

3-**Social & occupational therapy**

May be of value. Also family therapy & education is important.

4-**Drugs & Electroconvulsive therapy.**

- *ECT* See later, used in catatonic, paranoid, affective & excitement
- *Phenothiazines* (*Chlorpromazine* 100-200 mg/d) TDs Antipsychotics
- *Haloperidol* 10-30 mg/d (antidopaminergic) (Neuroleptics)
- *Antiparkinsonian* drugs (anticholinergics) e.g. *cogentin* (2 mg 1x2) (*benztropine*) or biperiden (akineton) 2mg tab 1 x 2 to avoid extrapyramidal manifestations of the above antipsychotic drugs.
* After control of S&S (usually after 4 weeks dosage can be reduced to maintenance dose).
  - After 6 m in remission, the drug can be withdrawn for trial period to see if relapse will occur or not!.
  - If relapse occurs therapy can be repeated again.
  - Some patients may be on lifelong maintenance therapy to prevent relapse.

1. **Long acting drugs** e.g. fluphenazine (Modecate) 25 mg, 1-2 amp every 2 weeks IM in case of poor compliance in chronic cases
2. **New atypical antipsychotics**
   - Clozapine (leponex) 100 mg tab, 300-600 mg/d
   - Risperidone (Risperdal) 6-8 mg/d
   - Olanzapine (Zyprexa) 10 mg tab 10-20 mg/d

### 2. Acute psychotic disorder
- Symptoms are similar to schizophrenia, but last < 6m with acute onset.
- It is usually due to stressful life events.
- Treatment like schizophrenia but for one year or less.

### 3. Schizoaffective disorder
- Psychotic episodes with prominent mood disturbances.
- It may be manifested as schizo-depression or schizo-mania.
- It must be differentiated from schizophrenia in which there is no prominent mood disorders.
- It is treated by antipsychotics and mood stabilizers.

### 4. Delusional disorder
- Delusions without other psychotic symptoms.
- There are systematized nonbizarre delusions about events that may occur in our life e.g. having a disease, loved at a distance, poisoned.
- It is treated by antipsychotic drugs.
Organic Psychiatric Disorders

- Organic mental illness are caused by anatomical or physiological disturbances occurring primarily in the brain or central nervous system or from physical illness elsewhere in the body. Organic pathology should be suspected when psychiatric symptoms occur in the presence of the following:

1. Clouding of consciousness.
2. Sudden deterioration of intellectual powers e.g. memory, orientation.
3. No positive emotional factors.
4. History of trauma or presence of neurological signs.

- This group of disorders result from pathological lesions within the brain.
- They can be classified as acute or chronic.

1. Acute (Delirium):

   It is also known as acute confusional state, involves a transient global impairment of mental function of acute onset. It is characterized by:

   1. **Impairment of consciousness:**
      The patient appears drowsy & lethargic.

   2. **Cognitive disturbances:**
      - All aspects of memory are affected especially for immediate and recent events. One of the early manifestations is disorientation in place, persons and time.
      - Impaired attention, concentration and thinking.

   3. **Perceptual disturbances:** macropsia, micropsia, & hallucinations.

   4. **Emotional changes:** e.g. anxiety, irritability, & depression.

   5. **Psychomotor changes:**
      Agitation - restlessness, hyperactivity to a dangerous degree.

Causes of acute confusional state (Delirium)

**Intracranial:**
- Trauma
- Vascular e.g. TIA, hge & infarction.
- Epilepsy,
- Infection e.g. encephalitis & meningitis.
- Tumor

**Extra cranial**
- Infections e.g. pneumonia & septicemia
- Toxic e.g. alcohol & anticholinergics.
- Endocrinal e.g. hyper or hypothyroid, Cushing $, Addison's disease.
d. Metabolic e.g. uremia, LCF, hypoglycemia
e. Hypoxia
f. Vitamin deficiency e.g. beriberi, pellagra, B12 deficiency and thiamin deficiency (Wesnicke-Korsakoff syndrome).

Investigations: Liver and kidney functions, electrolytes and endocrinal assessments. MRI.

Treatment:
1. The underlying cause must be determined.
2. Specific ttl of the cause.
3. Chlorpromazine or Haloperidol 5-10mg or sulpride (50-200 mg) are of choice except in delirium tremens when BZD are preferred.

Dementia is defined as a clinical syndrome ch.ch. by loss of intellectual function in the absence of impairment of consciousness.

Dementia is predominantly associated with the elderly, but in some disorders e.g. Alzheimer's disease & Huntington's chorea, the onset of symptoms occurs in middle life, these conditions known as presenile dementia with strong family history.

Features of dementia are:
- **Loss of general intelligence.**
- **Cognitive:** amnesia for recent events and disorientation to time, place and person.
- **Personality changes:** there is decline in personal manners & social awareness.
- **Emotional changes:** depression, anxiety or irritability.

Etiology of dementia:

1. **Degenerative:**
   - Alzheimer's dementia
   - Huntington's chorea
   - Parkinsonism

2. **Vascular:**
   - Cerebrovascular diseases.
   - Cerebral emboli.

3. **Trauma:**
   - Post traumatic dementia e.g. boxers.

4. **Space occupying lesion:**
5. **Infections:**
   - Encephalitis.

6. **Endocrinal:**
   - Hypothyroidism.
   - Hypoglycemia.

7. **Metabolic liver & renal failure.**
8. **Hypoxia.**
9. **Vitamin deficiency as B12 & folate**
Alzheimer's Disease:
- It is a primary degenerative cerebral disorder.
- It is insidious in onset, it is rare below the age of 50, but the incidence is higher in later life.

Neuropathology:
- Widespread cerebral atrophy will narrow gyri and wide sulci.
- Microscopy shows reduction of neurons with neurofibrillary tangles and amyloid angiopathy especially within frontal, temporal and parietal cortex.
- Also there is widespread disturbance at cortical & subcortical cholinergic neurotransmission.

Cerebrovascular Dementia: (multi-infarct dementia)
- This usually follows a series of acute strokes or a single major stroke, there, are focal neurological signs.
- A more gradual onset occurs following a series of ischemic episodes which produce multi-infarct dementia.

Investigations for dementia:
- Full blood count
- Liver functions
- Thyroid functions
- HIV Ab
- Kidney functions & electrolytes
- CT brain scan

Treatment:
- Any reversible cause should be treated.
- Small dose of phenothiazines or haloperidol for excitement and behavioural disorders, choline esterase inhibitors e.g. Rivastigmine (Exelon) for coagnitive impairment, benzodiazepines for sleep disorder.
- Cholinergic enhancement can improve memory in cholinergic deficit as in Alzheimer's disease (Tacrine 40-160 mg/D) = tetrahydroaminoacridine.

<table>
<thead>
<tr>
<th>Delirium</th>
<th>Dementia</th>
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<tbody>
<tr>
<td>Acute onset</td>
<td>Gradual onset</td>
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<tr>
<td>The duration usually &lt; 6m</td>
<td>Months or years</td>
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<tr>
<td>Drowsiness</td>
<td>Normal consciousness</td>
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<tr>
<td>Impaired memory</td>
<td>Impaired memory</td>
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<tr>
<td>Common visual hallucinations</td>
<td>Occur late</td>
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</table>
Drug Dependence & Substance Use Disorders

**Definition:**
Addiction has been defined as a state of periodic or chronic intoxication produced by the repeated consumption of the drug, with physical and/or psychological dependence.

**Criteria:**
- An overpowering desire or urge to continue taking the drug & to obtain it by any means.
- Presence of physical or psychological dependence
- Tendency to increase the dose (tolerance) to reach the same effect
- Presence of withdrawal symptoms in case of abstinence

**Main presentations**
- Mood changes
- Accidents
- Sleep disorders
- Infections (contaminated needle)
- Social problems, unexplained change in behaviour.

**Social factors in Addiction:**
It's true that addiction requires a vulnerable personality. The reasons for commencing drugs found to be:
1. Persistent pain e.g. renal colic
2. Pressure of work.
3. Marital difficulties.

**T.I.T. of Addiction:**
1. Admission to hospital is essential to give
   - Analgesics for pain
   - Antiepileptics for seizures
   - Sedatives, antipsychotics for excitement
   - Good nutrition
2. Abrupt withdrawal modified by the use of (phenothiazines), withdrawal from alcohol may require benzodiazepines.
3. After withdrawal supportive psychotherapy & adequate follow up are needed

**Aversion treatment**
For example
- **Apomorphine** can be given with alcohol to produce nausea & vomiting. Gradually the patient will develop a condition reflex associating alcohol consumption with unpleasant symptoms.
- **Antabuse** 0.5 gm daily: this substance interferes with normal oxidation of alcohol & produces a form of acetaldehyde poisoning. So the patient experiences flushing, tachycardia, headache, nausea & vomiting with alcohol consumption.
5. Treatment of drug toxicity

6. Occupational therapy and religious group.

1. CNS Depressants

Alcohol Dependence

Clinical feature of abuse

Chronic use
- Mood symptoms
- Peripheral neuropathy
- Korsakoff’s syndrome
- Wernick’s encephalopathy

Toxicity
- Incoordination
- Slurred speech
- Nystagmus

Withdrawal
- Sweating
- Seizures

Management:
1- Advice about the harmful effects of alcohol
2- Supportive psychotherapy
3- BDZ of choice for alcohol withdrawal, diazepam 10-20mg 4 times/d
4- Vitamins especially thiamine.
5- Phenothiazines for hallucination.
6- Disulfiram.
7- Naltrexone (opioid antagonist), reduce the risk of relapse into heavy drinking.

Harmful effects of alcohol abuse (systemic complications)

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<tr>
<th>Heart</th>
<th>GIT:</th>
<th>Neuro</th>
<th>Chest</th>
<th>Skin</th>
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<tbody>
<tr>
<td>Cardiomyopathy.</td>
<td>Oes. cancer</td>
<td>Neuropathy</td>
<td>Pneumonia</td>
<td>Spider naevi.</td>
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<tr>
<td>Hypertension.</td>
<td>Gastritis</td>
<td>Cerebellar degeneration</td>
<td>TB</td>
<td>Palmar erythema.</td>
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<td>Liver:</td>
<td>Pancreatitis</td>
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<td>Fatty hepatitis</td>
<td>Mallory Weiss syndrome</td>
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<td>Cirrhosis</td>
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<td>Cancer</td>
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<td>Muscles &amp; skeletal:</td>
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<td>Myopathy</td>
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<td>Gout</td>
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<td>Endocrine:</td>
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<td>Hypoglycemia</td>
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<td>Infertility.</td>
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</tbody>
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Medical complications (see later)
- Delusional disorders
- Delirium, coma
- Tremors
- Delirium tremors
- Oes. cancer
- Gastritis
- Pancreatitis
- Mallory Weiss syndrome
- Neuropathy
- Cerebellar degeneration
- Pneumonia
- TB
- Spider naevi.
- Palmar erythema.
Opiates
- Morphine, heroin, codeine are the main drugs in this group
- Physical dependence occurs within few wks.
- IV users liable to HBV & HIV & infective endocarditis in tricuspid valve.

Chronic use
- Mood changes
- Legal problems

Toxicity
- Constricted pupils
- Colic
- low temperature
- Respiratory depression

Withdrawal symptoms
- Rhinorrhea, sialorrhea
- Lacrimation
- Tachycardia
- Facial flushing
- Vomiting
- Diarrhea
- Hypertension
- Yawning

Treatment
1- Hospitalization
2- Gradual withdrawal.
3- Drugs to decrease the withdrawal symptoms (phenothiazines)

Barbiturates
Chronic use → cognitive impairment, behavioral disturbance and dysphoria

Toxicity
Ataxia, Nystagmus, RC depression, Coma

Withdrawal Symptoms of Barbiturates
- Insomnia
- Restlessness
- Convulsions
- Body aches
- Anxiety
- Tremors
- Delirium

Management
- Hospitalization
- Forced alkaline diuresis
- Doxapram + oxygen + ventilator
- Gastric lavage

Benodiazepines:
- Tolerance occurs after 6 wks of daily intake
- Withdrawal symptoms occur if the drug stopped abruptly
- Features of chronic use and toxicity similar to barbiturates.

Withdrawal symptoms:
- Anxiety
- Epileptic fits
- Insomnia
- Hallucination
- Paranoid delusions, delirium

TTT:
- Reduce daily dose gradually
- Avoid other drugs e.g.: BB & antidepressants
Ephedrine
- Chronic use → anxiety
- Toxicity → sympathetic over activity
- Withdrawal → fatigue and depression

Amphetamines & Cocaine
- Stimulate CNS; elevate the mood
- Decrease the appetite
- Withdrawal → depression, fatigue
- Chronic Ingestion → paranoid schizophrenia like (psychosis)

LSD:
- Chronic ingestion → psychotic illness, hallucination, euphoria.
- Toxicity → red eye, arrhythmia, hypoglycemia, Impaired coordination
- Withdrawal → irritability and mood changes

Cannabis
- Derived from plant.
- Usually smoked mixed with tobacco
- It quickly produce sense of relaxation & well being.
- Psychological dependence is common but tolerance & withdrawal symptoms are unusual.
- Toxic confusional state occurs after heavy consumption.
- Long term consequence of regular consumption is Lack of drive and motivation.
- Long term use also lead to cerebral atrophy.

Bhang
- The active principle in it is 9 delta tetra hydrocannabinoid
- It is presented by impaired distance & time perception, in huge doses it may lead to hallucinations.
- It can also be associated with panic attacks especially in the naive abuser (first time)
- It can also induce paranoid reaction
- It is mainly associated with psychological dependence.
- It is one of the main gateway drugs that can lead to further abuse of other substances (i.e. lead to addiction of other substances e.g. heroin, cocaine)

- Mainly in the form of psychotherapy (individual as well as group therapy)
- Family therapy
  Patients with dual diagnosis (i.e. abusing Bhang + having other psychiatric disorders) should receive ttt for both
Behavioural disorders

1. Sleep Disorders

A) Dyssomnias: Divided mainly into Insomnia, hypersomnia and others.

1. Insomnia

a- Difficulty falling asleep
b- Frequent awakening.
c- Early morning awakening.

Either this or this will lead to:
- Difficulties at work, social & family life.
- Makes it difficult to carry out routine or desired tasks.

Common Causes:

1. Physical causes:

Medical Problems:
- H.F.
- Pulmonary disease
- DM
- Sleep apnea
- Pains, nocturia
- Hyperthyrodism, hypothyrodism.

Medications:
Steroids, decongestants, NSAID

3. Lifestyle Causes:
- Noise
- Too hot or too cold.
- Tea, coffee & alcohol.
- Heavy meal before bed

2. Psychological causes

- Depression.
- Anxiety / stress

3. Lifestyle Causes:
- Excessive mental or physical activity.
- Daytime naps
- Irregular sleep schedule

What treatment can Help:

Supportive therapy is the preferred ttt

* Supportive therapy for:
- Stress/life problems.
- Anxiety
- Depression.
- Changes to life style & sleep habits

* Medication for insomnia

1. With depression, give sedative antidepressant e.g. amitriptyline.
2. With anxiety, short acting benzodiazepines not taken for longer than 3 wks.
* Lifestyle Change Strategies and sleep hygiene:
- Try to minimize noise in your sleep environment, if necessary consider ear plugs.
- Try to make sure that you are not too hot or too cold.
- Reduce the amount of alcohol, coffee & tea that you drink, especially in the evenings.
- Try to avoid eating or drinking before going to sleep.
- Try to have your dinner earlier in the evening rather than later.
- Don't lie in bed trying to sleep. Get up & do something.
- Have regular times for going to bed at night & waking up in the morning.
- Reduce mental & physical activity during the evenings.
- Increase level of physical activity during the day, build up a regular exercise routine.
- Avoid day time naps during the day, even if you have not slept the night before.
- Use relaxation techniques, for example, slow breathing.

* Narcolepsy may be associated with cataplexy (sudden loss of muscle tone and stability).

* Sleep apnea is also considered as dyssomnia.

2. Hypersomnia
Excessive sleepiness during normal working hours. It is treated by tricyclic antidepressants e.g. clomipramine (anafranil).
- Other dyssomnias e.g. Narcolepsy i.e. recurrent sleep attacks lasting to: 10-20 minutes, the patient feels refreshed by the sleep. The treatment similar to hypersomnia.
- Also Nocturnal myoclonus and restless leg syndrome are dyssomnias, treated by BZD, carbamazepine.

B. Parasomnias:

Sleep walking: (Somnambulism)
During sleep walking vision and coordination remain intact but serious accidents can occur. These patients sleep in a protected environment so, it is impossible for them to fall from windows or downstairs. These patient may eat, use the bathroom or talk to others during the attacks.

Night terrors:
The patient awakens screaming on crying which is associated with sweating, increased heart and respiratory rate. The patient is usually unable to recall episodes (unlike nightmares) night terrors occur in NREM sleep, during the first third of the night.
Parasomnias resolve with improved sleep hygiene especially reduced consumption of alcohol and caffeine.

Nightmare disorder:
The patient is repeatedly awakened by frightening dreams. Nightmares occur during REM sleep in the second half of the night.

Benzodiazepines for night terrors and tricyclic antidepressants especially clomipramine (anafranil) for nightmares.
2- Sexual Disorders

Adolescence:
Sexual problems are universal at this time. The adolescent, thought sexually mature is psychologically immature & unable to take on adult responsibilities, the resulting conflict leads to anxiety & a search for sexual outlet.

Homosexual Behavior:
The sexual activities between members of the same sex is common in adolescents, especially in closed community as (school). It usually represents a transitory phase & disappear after maturity. Guilt feelings is common. Genetic factors may be of etiological importance in some cases but there are no endocrine abnormalities. Contrary to popular belief the homosexual is rarely abnormal appearance or manner. In many cases psychogenic factors predominate e.g. disturbed parent - child relationship!

Impotence & frigidity:
In the adult, there are great individual variations in libido & sexual performance. Consequently, some cases of impotence & frigidity can be considered as being one extreme of the range of the normal. Other cases are due to physical or mental illness & others to emotional immaturity e.g. fear of sexuality. Difficulties of this kind are commonest at the beginning of marriage (Honeymoon impotence). Anxiety is a frequent cause of impotence & premature ejaculation, it is a common presenting symptom in anxiety neurosis.

Sexual:
Exhibitionism:
Exposing oneself to obtain sexual pleasure. It usually consists of the exposure of the genitalia.

Transvestism:
Sexual excitement from dressing in the clothes of the opposite sex.

Fetishism:
In which in animate objects are the preferred or only means of achieving sexual excitement.

Sadism
This is obtaining pleasure from acts of pain in others.

Masochism:
This is the seeking of sexual pleasure from what would normally be painful.
- Pedophilia: Repeated sexual activity with prepubertal children is the method of sexual release.
- Voyeurism: Observing the sexual activity of others in the preferred means of sexual arousal.
- Frotheurism : Rubbing against non consisting persons.

Treatment:
-Psychotherapy in suitable cases
- Behavior therapy
3- Eating Disorders

Anorexia Nervosa
- Female during adolescence
- 5-10% in male
- Upper social class
- Hormonal change may be a factor but mostly 2ry to weight loss so, return normal after weight gain.

Aetiology:
- Genetic, hormonal (↓ sex hormones).
- Escape from emotional problems of adolescence.
- Families of such patients are ch.ch by over protection.

Diagnostic criteria:
1- Weight loss at least 15%-25% of body weight
2- Avoidance of high caloric food
3- Distortion of body image = the patient regards herself as fatty when she is thin.
4- Amenorrhea

DD:
- Panhypopituitrism
- Depression (actual loss of appetite) in anorexia nervosa there is refusal only.

Treatment:
1- Psychotherapy
2- Educating the patient about the danger of starvation.
3- Observe the patient during meal & after one hour.
4- Antidepressants, antipsychotics

Bulimia Nervosa
- May be related to anorexia
- It is almost exclusively confined to women age older than cases of anorexia nervosa

Diagnostic criteria:
1- Recurrent bouts of overeating
2- Lack of self control during eating
3- Self induced vomiting or purging or alternating periods of starvation (attempts to counteract)
4- Weight is within normal & normal menses
Treathent:

1- Psychotherapy
2- Behavioral therapy
3- SSRIs

Medical complications of eating disorders
- Cachexia, amenorrhea, constipation and abdominal pain.
- Complications of vomiting and laxatives, e.g. hypokalemia, alkalosis, tetany, gastric erosion.
Personality Disorders

Personality denotes characteristic ways of thinking, feeling behaving & reacting to the environment, when this psychological signature strikes a useful balance between consistency & adaptive flexibility, we speak of personality traits. A personality disorder is said to exist when a person chronically uses certain mechanisms of coping in an inappropriate & maladaptive fashion.

Criteria for diagnosis :
- Long history
- Recurrent maladaptive behavior
- Minimal anxiety to the person himself
- Major problems with others

1- Paranoid personality
   Suspicious & hypersensitive to perceived slights & injuries, they believe that someone might harm them.

2- Schizoid personality
   There persons are loners (tendency to isolation) who seem to have little need for others. Sensitive and avoiding close relationships

3- Schizotypal personality
   Ideas of references, social isolation and paranoid ideation

4- Histrionic personality
   Superficial relationships, there is an exaggerated expression of emotions. Dependant, dramatizing and attention seeking. Emotional immaturity, sexualization of non sexual objects. Selfishness.

5- Antisocial personality
   Antisocial behavior, does not learn from experience or punishment. Failure to accept social standards and the law.

6- Compulsive or obsessive personality
   Persons are preoccupied with rules, details – inflexible - perfectionism

7- Cyclothymic or affective personality
   Mood swings, fluctuating between elation and sadness

8- Inadequate personality
   The person fails in emotional, social and occupational adjustment.

9- Narcissistic personality
   Gradiosity, Exhibitionism, preoccupation with fantasies of success, power, beauty and intelligence.

Treatment: psychotherapy & antidepressants & sedation may be used
Childhood Psychiatric disorders

There are two factors which have contributed to the recent recognition & expansion of child psychiatry:

1. The origin of neurotic & psychotic illness of adult life is found in the experiences of early childhood according to the psycho-analytical school.
2. Psychiatric treatment of children may prevent psychiatric illness of adult life.

There are many factors which may influence the development of psychiatric illness! e.g.:

- Disharmony between parents.
- Maternal over protection.
- Excessive strain or competition with an older brother.
- Divorced parents.
- Other factors ....

Types of child psychiatric and mental disorders

1. Mental retardation (MR)

Types:

1. Mild MR (IQ 50-70%) = moron
2. Moderate MR (IQ 30-50%) = imbecile
3. Severe MR (IQ < 30%) = idiots

Management

- Special schools
- Rehabilitation
- Speech therapy
- Family counseling

II. Attention – Deficit/Hyperactivity Disorders (ADHD)

It is a triad of inattention, hyperactivity and impulsivity.

Attention deficit symptoms (inattention)

- Often fails to give close attention to details or makes careless mistakes in school work
- Often does not seem to listen when spoken to directly
- Is often easily distracted by external stimuli
- Often does not follow through on instruction and fails to finish school work
**Hyperactivity**
- Often leaves seat in classroom
- Often talks, runs or climbs excessively during inappropriate situations

**Impulsivity**
- Often blurts out answers before questions have been completed
- Often has difficulty in a waiting turn

**Clinical types**
1. Attention – deficit/Hyperactivity disorder combined type
2. Attention deficit/Hyperactivity disorder predominantly inattentive type
3. Attention – deficit/hyperactivity predominantly hyperactive impulsive type

**Management:**
1. Methylphenidate (CNS stimulant), side effects e.g. growth retardation, depression
2. Tofranil (Imipramine)
3. Behavioral therapy

**III. Conduct disorder**
*This is a pattern of behavior in which the basic rights of others or rules are violated*
1. Aggression to people or animals
2. Destruction of property
3. Violation of rules

**Management:**
- Reward the positive behavior
- Anti-aggressive medication as tegretol

**IV. PICA**
Persistent eating of non nutritive substance
For example: eat paint, plaster or cloth usually no specific biological abnormalities

**V. Stuttering**
*Disturbance in normal fluency and time patterning of speech that interferes with academic or occupational achievement or with social communication.*

**Stuttering may be characterized by one or more of the following speech therapy:**
- Sound and syllable repetitions
- Sound prolongation
- Broken words e.g (pauses within a word)

**Management:**
- Speech therapy
- Drugs as haloperidol (tablet 0.5 mg/ 12hr)
- Support for parents
VI. Enuresis

The child with enuresis continues to urinate at inappropriate times & places after the time when he should been toilet trained 2-4 year, male > female. It may be nocturnal, diurnal or combined.

a- Primary: no period of bladder control

B- Secondary

(Develops after a period of at least 1 year of good bladder control)

Etiology

1- DM, DI
2- Spina bifida
3- UTI, bladder anomalies
4- Psychological factors
5- Idiopathic

Treatment

Non pharmacological
- Decrease fluid after dinner
- Awakening the child to urinate after 1-2 hrs of sleep
- Bladder exercise (to increase function capacity of the bladder)

Medications
- TC antidepressants e.g. imipramine 10-25 mg at night
- Desmopressine nasal spray
- Anticholinergic e.g. oxybutynin (uripan) and tolterodine (Detrusitol)

Psychotherapy

VII. Encopresis

Repeated passage of feces into inappropriate places whether involuntary or intentional. Investigations to exclude organic causes are important, behavioural and psychotherapy are essential.

VIII. Autistic disorder

- Impairment in social interactions e.g. nonverbal behaviour e.g. eye to eye gaze.
- Failure to develop peer relationships.
- Delay in spoken language.
- There is associated mental retardation.
- The onset of the disease is before age of 3 years.
- It is treated by support for parents, speech therapy, antipsychotic drugs e.g. haloperidol and risperidone.
Q Drugs Causing Psychiatric Manifestations
- Anticonvulsant (phenytoin) → confusion, hallucinations
- NSAID → anxiety, insomnia
- Steroid pills → depression
- Sympathomimetics → insomnia
- Anticholinergic → restlessness delirium
- Tetracycline → depression

Hormones
- Thyroxin → anxiety
- Androgen → euphoria
- Estrogen → well being
- Insulin → anxiety

Antihypertensives
- Aldomet → depression
- Inderal → nightmares

Q Psychiatric Presentation Of Medical diseases
- Hyperthyroidism → anxiety
- Hypothyroidism → depression
- Hyperparathyroidism → depression
- Addison → depression
- Pheochromocytoma, hypoglycemia → anxiety
- In viral infection → depression
- Wilson → psychosis
- SLE → depression

Q Psychosomatic Disorders

Mechanism
Activation of autonomic NS & neuroendocrine system e.g. thyroxin, cortisol

CVS: IHD, hypertension, arrhythmia
Respiratory: asthma, hyperventilation
GIT: peptic ulcer, IBD, anorexia
Musculo-skeletal: rheumatoid arthritis
Endocrinal: DM – hypertension, exacerbated by stress

NB: Type A personalities have cholesterol, ↑ LDL & triglycerides → myocardial infarction
Psychiatric Emergencies

**Definition**: It is a disturbance of behavior, emotions, thinking &/or action for which emergency & immediate intervention is required.

**Epidemiology**: 10% of emergency patients are due to psychiatric disorders.

1- **Excitement & Violence**:

*Excitement is*: increased motor activity & extensive psychiatric activity, often accompanied by autonomic hyperactivity.

*Violence is*: form of behavior that can endanger life or harm others.

A- **Excitement or violence due to psychiatric disorder**.

1. **Psychotic disorders**:
   - Acute psychosis, paranoid and catatonic schizophrenia.

2. **Mood disorders**:
   - *Manic episode* with irritable mood
   - *Depressive episode* with suicidal attempts

3. **Personality disorders**:
   - Explosive personality disorder, borderline personality disorder, antisocial personality disorder, & hysterical personality disorder.

4. **Dissociative disorders**:
   - Patients may present with hysterical excitement

B- **Excitement with Medical disorders**.

The following include medical disorders that may present with violent behavior or excitement

1. **Major organ dysfunction**: Liver, kidney, heart, lung.

2. **CNS**: infections, frontal or temporal lobe dysfunction, head injuries, ....

3. **Autoimmune diseases**.

4. **Electrolyte imbalance**.

5. **Endocrinopathies**.

6. **Metabolic disorders**: hypoglycemia, porphyria, electrolyte imbalance.

C- **Excitement due to drug intoxication or withdrawal**

1. **CNS stimulants**: Amphetamines, cocaine.

2. **Opiates & CNS depressants**: e.g. BDZ. barbiturates. alcohol

3. **Hallucinogens & cannabinoids**: LSD. Cannabis

D- **Excitement due to non medical nor psychiatric disorders**

1. **Reaction to frustration**: frustration situations may lead to hyperaggressiveness, destructiveness, & hostile attacks
2. **Malingering**: production of false or grossly exaggerated physical or psychological symptoms

**Management of excitement & violence:**

1. **Verbal intervention:**
   - Clinicians should attempt to calm the patients verbally.

2. **Physical intervention: Restraint & Seclusion:**
   - Restraint must be performed by at least five persons - There should be a specific plan e.g. Each taking one limb, parental sedatives after.
   - Nursing observation every 15 min, don't remove restraints except in presence of adequate number of staff.

3. **Pharmacological intervention:**

<table>
<thead>
<tr>
<th>Parental Unit dose</th>
<th>Side effects &amp; complications</th>
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### I. Neuroleptics

**a-High potency**

- **Haloperidol (haldol 5mg/ml)**
  - 5-10 mg/6 hr
  - Dystonia, akathesia, parkinsonian symptoms

- **Thioxanthenes (Clopixol, Acuphase 100 mg amp)**
  - 100 mg/3 days IM
  - Sedation anticholinergic symptoms, orthostatic hypotension, painful injection site.

**b-Low potency**

- **Chlorpromazine 25mg/ml**
  - 25-50 mg IM/6 hr
  - Rare complications: laryngeal edema, neuroleptic malignant syndrome, drug induced catatonia, behavioral toxicity.

### II. Antianxiety

- **Diazepam 10 mg/2 ml**
  - 5-10 mg IV
  - Sedation, potentiates CNS depressants, respiratory depression, paradoxical effect

### III. Hypnotics

- **Na amytal**
  - 2.5 or 5% solution IV - 1 cc/min
  - Potentiates CNS depressants, respiratory depresson, bronchospasm, laryngospasm
Dealing with suicidal patients:

Clinical presentation:
1- **Suicidal behavior**: ingestion of drugs, slashing wrist, burning, shooting, jumping
2- **Suicidal ideation & thoughts**

Causes:
1- Mood disorder.
2- Substance use related disorders
3- Schizophrenia
4- Organic brain syndrome
5- Panic disorder
6- Personality disorder
7- Medical illness
8- Non-psychiatric disorders.

Management:

I- **General rules**:
1- Take all suicide threats seriously
2- The patient must be approached in an empathetic manner
3- Physicians must remain calm & uncritical
4- Obtain information from family members or friends
5- Ask the patient about suicide in privacy
6- Special nursing to protect the patient; do not allow sharp instruments

II- ICU admission if needed

III- Management of complications:

IV- Assessment of mental state

*History*: recent stressful events, drug intake.
*Past history* of medical illness, psychiatric disorder or positive family history.

V- Referral to psychiatrist to treat the cause

3- Dealing with victims of acute stress: (Rape Assault, Disasters)

Management

**History & examination**:
1- Medical history, Physical examination to detect & document evidence of injuries,
2- Mental status examination

**Investigations**: radiological ...etc

**Treatment**
1- Physical ttt of injuries
2- Psychological: reassurance
3- Pharmacological ttt by hypnosedatives
4- Referral to a psychiatrist if depression or post traumatic stress disorder is suspected.
Clinical presentation:

1. **Circulatory failures**: Stimulants, hypnotics, alcohol
2. **Respiratory failure** ARDS & inhalation pneumonia: opiates, barbiturates.
3. **Myosis**: opiate overdose
4. **Mydriasis**: anticholinergics, antidepressants, hallucinogens, stimulants
5. **Hyperthermia**: alcohol, stimulants, neuroleptic malignant syndrome
6. **Seizures**: overdose of alcohol & cannabis, withdrawal of BDZ, barbiturates & alcohol
7. **Agitation, excitement**: overdose of alcohol, hallucinogens, withdrawal of barbiturate & alcohol.
8. **Acute dystonic reaction** (side effect of neuroleptics).
9. **Abdominal distention, urinary retention**: anticholinergics, antidepressants, antiparkinsonians
10. **Hypertensive encephalopathy**: cheese reaction with MAOI
11. **Encephalopathy & tremors**: (Lithium encephalopathy)

Investigations:

*Laboratory*: urine screening & serum levels of the drug

*Other investigations* should be done according to the clinical condition

Management

- **Forced diuresis**
- **Hemodialysis** if the drug is dialyzable
- **Steroids** IV or IM if needed
- **Specific according to the condition**:
  - **Opiates**: naloxone (Narcan) 2 mg IV to be repeated until the pupil becomes dilated
  - **BDZ**: give flumazenil amp as IV injection
  - **Lithium intoxication**: give Na bicarbonate, aminophylline, mannitol, hemodialysis.
  - **Torsion dystonia**: give diazepam IV / infusion, coffee enema, or akinton injection followed by antiparkinsonian oral drugs & oral diazepam.
  - **Neuroleptic malignant syndrome**: Cold bath, ice enema. Dantrolene injection IV, bromocryptine
  - **Cheese reaction**: phentolamine IV, lasix IM & chlorpromazine IM
  - **Seizure**: give diazepam injection by IV drip
  - **Violence & excitement**: give neuroleptics (see management of violent patient)
5- Dealing with psychiatric disorder-related emergencies

- **Panic attacks:**
  i.e. episodes of intense anxiety that come on suddenly, rise rapidly to the maximum intensity with an overwhelming sense of impending death or terror associated with tachycardia, sweating & dyspnea.

- **Post Traumatic stress disorder:**
  Extraordinary & psychologically traumatic event followed by re-experiencing the event

- **Emergency management (for both panic & PTSD):**
  1- Reassurance
  2- Short acting *BDZ*
  3- Referral to a psychiatrist for proper management.

- **Factitious & malingering**

- **Conversion/Dissociative disorder**

- **Others**

### Differential Diagnosis of acute excitement  (Important causes)

- Head injury
- Hypoglycemia
- CNS stimulants
- Hepatic encephalopathy
- Alcoholism
- Agitative depression
- Catatonic excitement.
- Manic excitement.
- Drug withdrawal
- Malingering
Treatment in Psychiatry

1. Psychotherapy:

Supportive psychotherapy

There are many schools but the essential features of such lines are:

1. Personal discussion i.e. changing or influencing ideas or emotions & exploration of mental conflicts & stresses.
2. Establishment of an emotional relationship with the patient
3. Minimize or prevent deterioration and relapse
4. Help patient to cope with problems

A- Individual psychotherapy:

B- Group psychotherapy

It is performed in groups ranging from about 5-15 patients. The aim is to give support stimulation

Psychoanalysis:

It is based on that mental illness, especially neurosis disorders result from unconscious conflict around the relation between the child & his parents between age 3-6 yrs !?

Behavioral therapy

This is based on the fact that neurotic symptoms are learned patterns of behavior. If we can re-educate the patient to new styles of situations we may control this abnormal conditioned reflex.

Various lines of behavior therapy include:

1- Aversion therapy

The aim is to associate either mentally or physically certain disorders with unpleasant physical symptoms such as apomorphine, antabuse with alcohol

2- Positive conditioning

e.g. in nocturnal enuresis, a bell to wake the child when the bladder is full

3- Flooding:

Exposure of the patient to the most dreadful situation for up to one hour with the use of sedative, used in phobic disorders.

4- Bio feedback therapy:

It can be done by EMG for controlling tension, spasm.
Cognitive therapy used in depression, it aims to help patients to identify recurring negative thoughts and learn how to challenge them.

**II- Electrical Ect (Electroconvulsive therapy)**

*It is a sort of brain synchronization therapy (BST), based on regulation of the dysregulated receptors using electrical impulses. The treatment involves the passage of an electric current across two electrodes applied to the anterior temporal areas of the scalp to induce an epileptic fit.*

**Indications:**

1. Severe depressive states
2. Schizophrenia, especially the catatonic type.
3. High suicidal risk when quick response is needed
4. Failure to respond to antidepressants
5. Elderly when tricyclic antidepressants may be unsafe
6. Depressive stupor

**Technique**

*The patient may need from 6-12 sessions given twice/wk. The mode of action by possible stimulation of the hypothalamus increasing the brain amines. The risk are minimal but a memory disorder for recent events may occur for a period of 4 wks, usually we use thiopental and muscle relaxant during the procedure.*

**Contraindications**

- Recent myocardial infarction, - Chest infection,
- Increase ICT, - Cerebral hge

**Psychotropic drugs**

**Anti-anxiety**

**1-Benzodiazepines**

*They act on the benzodiazepine site on GABA receptors → potentiation of action of GABA (inhibitory neurotransmitter).*

**Classification of benzodiazepines**

1. **Short acting:**
   - Alprazolam (xanax 0.25-0.5 mg/D)
   - Lorazepam (Ativan 1-2 mg/D)

2. **Intermediate acting:**
   - Diazepam (valium 5-10 mg tab)
   - Bromazepam (laxotanil 1.5-3 mg tab)
3. Long acting:
   - Clonazepam (Rivotril 0.5-2 mg/tab)

Uses:
- Anxiety disorders
- Status epilepticus
- Muscle relaxants.

Side effects
- Sedation
- Hang over (with long acting)
- Withdrawal symptoms with valium.

How can you use benzodiazepines correctly
- Short acting
  - Short term use
- Intermittent use
  - Lowest effective dose
- Used only in severe anxiety

Problems of long term use of benzodiazepines
1. Tolerance
2. Dependence
3. Rebound effects especially rebound insomnia, so the rate of dose reduction should be very slowly.

Other non benzodiazepines anti anxiety e.g. Buspirone (Buspar) 5-10 mg bid. Beta blockers (propranolol 30-60 mg/d), used in anxiety; tremors, it decrease the peripheral manifestations of anxiety.

2-Antidepressant drugs
a-MAOI (Old drugs)
- They increase the biogenic amines e.g parstelin (pamate + stelazine) through inhibition of MAO enzyme → Blocke of 5HT and NA catabolism
- They can give effects within 5-7 days caution should be taken on giving MAOI with tofranil, sympathomimetics otherwise hypertensive crises occurs in about 5-10%

b- Tricyclic Antidepressants
(inhibit re-uptake, of amines NA, DA and 5HT)
Stimulant: Impiramine (tofranil) 5 - 200 mg/d
Sedative:
- Amitriptyline (Trypizole) 75-200 mg /d
- Clomipramine (Anafranil) 75-200mg /d

Side effects
- Anticholinergic (dryness of secretions, constipation, retention of urine, glaucoma)
- Postural hypotension
- Cardiac toxicity (arrhythmia)

**c- Selective Serotonin Re-uptake Inhibitors (SSRI)**

- They act through inhibition of serotonin reuptake
- less cardiotoxic
- less sedative
- less anticholinergic

**Examples**
- Sertraline (Lustral) 50-150-mg/ d (50 mg tab)
- Citalopram 20-60 mg/d tab (Cipram) (20 mg tab)
- Fluvoxamine (Faverin) 100-200 mg/d (50 mg tab)
- Fluoxetine (prozac) 20-40 mg/d (20 mg tab)
- Es. – citalopram (cipralex) 10-20 mh/d (10mg tab)

**Side effects of SSRI**
- GIT disturbance
- Tremors
- Insomnia
- Delayed ejaculation

**D- Selective Serotonin and norepinephrine Reuptake inhibitors (SNRIs).**

e.g. Venlafaxine (Efexor) 75 mg cap, 75-150mg)d.

**3-Mood stabilizers**

**Uses:**
- Bipolar disorders
- Resistant depression
- Schizo affective disorders
- Resistant schizophrenia

**a-Lithium salts (Priadel)**
- Lithium carbonate 800-1200 mg/d.
- It replaces sodium in the neurons thus stabilizing membrane excitability
- Side effects are: DI, tremors, hypothyroidism

**b-Carbamazepines (Tegretol), Na valproate (Depakine)**
- They are anticonvulsant drugs.
- Tegretol 600-1200 mg/D
- Depakine 500-2000 mg/d.

**4-Antipsychotics**

The conventional antipsychotic act through blocking dopamine receptors in the limbic & striatal systems. The new antipsychotics block dopamine receptors in limbic system and serotonergic receptors in frontal cortex.
Psychiatry

a-Phenothiazines:

- Aliphatics e.g. chlorpromazine (neurazine) 600-1000 mg/d used in excited agitated schizophrenia, mania, thioridazine (melleril).
- Piperazines e.g. trifluoperazine (stelazine) 15-30 mg/d, fluphenazine (moditen) 15-30 mg used in retarded schizophrenia

| Modecate 25 mg amp (long acting), 1-2 amp. IM / 2 weeks |

b-Butyrophenones

e.g. Haloperidol, safinace 5-30 mg/d, it is effective in controlling agitation, excitement

Side effects

- Sleepiness - Jaundice
- Hypotension - Impotence
- Bone marrow depression - Hyperprolactinemia
- Extrapyramidal e.g. parkinsonism, dystonia and akathesia, this can be avoided by anticholinergic drugs.

c-Thioxanthenes

- Fluanoxole 0.5-3 mg tab, 3-6 tab/D
- Side effects as phenothiazines

d-Novel antipsychotics (antagonise dopamine and serotonin receptors)

- Clozapine (leponex) 300-600 mg/d – Olanzapine (zyprexa) 10-20mg/d
- Side effects: weight gain, Impotence, frigidity
Psychiatric interview and mental examination

1- Identifying or personal data:
   Name, age, sex, occupation, residence and marital status

2- Reason for referral:
   - Why? → for tt.
   - How? → upon his request
     → against his will, [Importance of this → insight, compliance.]

3- C/O (بالعربي)
   - أيه اللي حابس المستشفى
   - اكتب كلام المريض بالتفصيل حتى و لم يكن له معنى
   - حاول توجيه بعض الأسئلة لتصضيف معلومات مثل (رضلات، هلام، واسوس، مخاوف، عدم ترابط الكلام)
   - حاول إبراز هذه الأشياء خصوصا لو أنت ملاحظه بنفسك

4- HPI
   - History of the symptoms in chronological manner.
   - Onset....., Course,...... Duration of symptoms
   - Significance → progressive course → schizophrenia
     → regressive or periodic → manic depressive disorders.

5- Associated impairments.
   - Biological signs of depression
     - Decrease weight
     - Insomnia
     - Amenorrhea
   - Habits change (sleep, eating, tea, ...)
   - Social relationships (work, home, relatives)

6- Family History
   - a-Father, b-mother, c-siblings, (Age, their relation with the patient)
   - Also ask about (similar conditions or any other psychiatric or physical illness).
7- Past History

*Psychiatric*
- Psychiatric illness
- Received medications
- Previous hospital admission

*Medical*
- Fever (meningitis, encephalitis)
- Epilepsy

8- Personal History
- Prenatal, natal and postnatal history as regard maternal exposure to diseases, drugs or radiation, problems during labour and in the first year of life.
- Developmental history: Milestones of development.
- Behavioural problems during childhood. e.g. nocturnal enuresis.
- Scholastic history e.g. performance or difficulties.
- Occupational history. e.g. jobs (duration of stay or reasons of leaving).
- Psychosexual history: Age of puberty, menarche, menstrual history, sexual orientation.
- Marital history. e.g. age of marriage, divorce, children, pregnancy and lactation for females.
- Military history.
- Forensic history. e.g. troubles with police or law.

9- Personality before illness (premorbid personality)

a- Personality traits, character e.g. rigid, dependent.
b- Attitude to self e.g. confident or not.
c- Attitude to others e.g. social withdrawal.
d- Hobbies, predominant mode, religious background)
e- Reaction to stress (verbal, physical, ....)

Psychiatric Examination

1- Appearance and behaviour
- Self hygiene, dressing
- Attitude to examiner, psychomotor activity.

2- Speech
- Quantity → normal, talkative or induced.
- Quality → e.g. coherent, or incoherent.

3- Mood
- Reactive (normal)    - Depressed    - Euphoric

4- Pre-occupation

5- Thinking e.g. Thought disorders (delusions, obsessions, ideas of reference)
6- Perceptual disorders
- Hallucinations (Visual → organic, auditory → schiz., tactile → cocainism)
- Illusions
- Depersonalization (Feelings of detachment from self or from the environment.

7- Cognitive functions:
- Orientation (T.P.P) (time, place & persons)
- Attention (أناى عليه ينتبه)
- Concentration i.e. to maintain attention (استطاعة في عمليات الجمع و الطرح)
- Memory
  - Immediate (جملة و يعيدها)
  - Recent (ماذا فعلت بالآمس - فطرت إيه)
  - Remote (ذكريات الطفولة وأسماء الروؤساء القدامى ، تواريخ ميلاد أولاده)
  - Intelligence (مستوى الدراسى ، الوظيفة ، النمو)

8- Insight i.e. awareness of the illness and the need of treatment e.g. (complete denial of illness, slight awareness)

 هل تعتقد أن لديك مشاكل ، هل أنت في حاجة إلى العلاج

9- Physical examination & local medical ex, & neurological ex,

10- Investigations:
  a- Social i.e. more information about the patient from his family.
  b- Psychometry (IQ testing)
  c- Biological (T3&T4, Cortisol, VMA,....)
  d- Imaging (CT, MRI)
  e- EEG