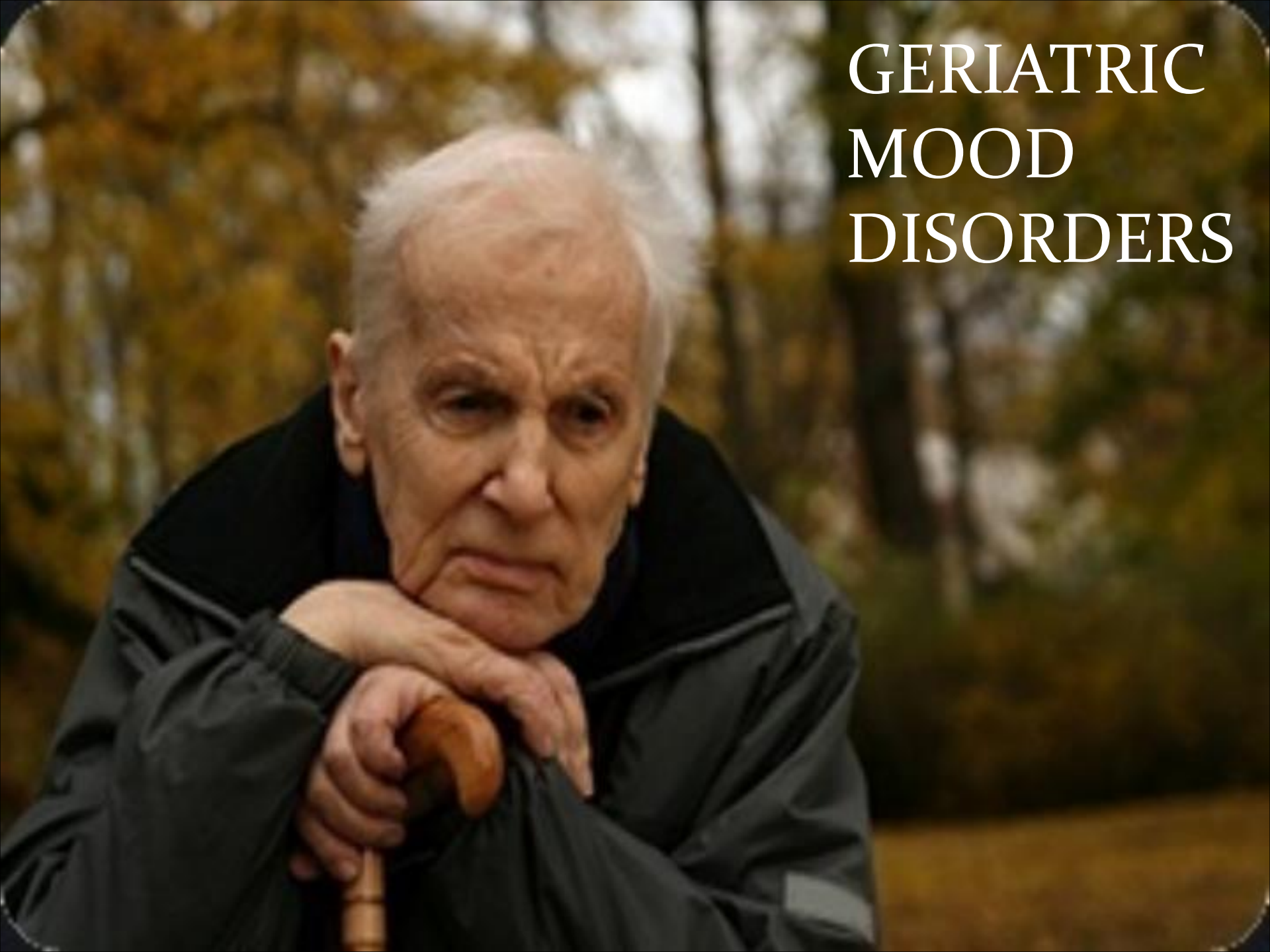

GERIATRIC MOOD DISORDERS

INTRODUCTION

- The term GERIATRICS comes from the greek words-
  geron meaning old man & iatros meaning healer.

- Geriatric psychiatry is a sub speciality of psychiatry dealing with the study, prevention and treatment of mental disorders in humans with old age.

INTRODUCTION

- GERIATRIC MOOD DISORDERS INCLUDE-

-Depressive disorder

-Manic episode

-Bipolar affective disorder

-Dysthymia

-Cyclothymia

DEPRESSION IN ELDERLY

DEPRESSION

- WHO recently concluded that depression produces *a greater decrement in health than angina, arthritis, asthma, and diabetes.*
- Depression does not have pathognomonic symptoms or signs in elderly.
- In fact, many of the symptoms of depression can be caused by medical illnesses.

DEPRESSION

- **Reasons for failing to recognize** geriatric depression include-

-The clinical complexity of the syndrome

-Social bias

-Barriers of the settings in which most depressed elderly patients are treated.

EPIDEMIOLOGY

- Mood disorders occur in the geriatric population at a **rate lower than that of younger adults**.

- The overall prevalence of MDD among persons aged 65 years or older was estimated to be 1.4% in women and 0.4% in men.

- An overall **prevalence ranges from- 1-40%.**

EPIDEMIOLOGY

- **2% - dysthymia**
- **4%- adjustment disorder with depressed mood**
- The male:female ratio is 1:2

EPIDEMIOLOGY

Prevalence of MDD in elderly in different settings-

Location	Prevalence
Community	0.9–9.4 %
Hospitals	10–12 %
Nursing homes	14–42 %

EPIDEMIOLOGY

- SUICIDE-

-It **is twice as frequent in** older adults as in the general population.

-The incidence of suicide is high in elderly-40 per 100,000 population.

-60%- men who commit suicide

-75%- women who attempt suicide

EPIDEMIOLOGY

- Geriatric mood disorders cause-

  -Suffering

  -Increase medical burden

  -Worsen the outcomes of many medical conditions

  -Contribute to disability

ETIOLOGY

- The most important etiological factors for depression in old age are-

A. BIOLOGICAL-

-Genetic
-Comorbid medical illness
-Pain
-Medication

ETIOLOGY

- **GENETIC-**

-There is some genetic contribution to depression in late life but this is weaker than in younger adults.

-**Polygenic inheritance is** considered.

-Genetic polymorphisms in the serotonin transporter gene & another gene that gained attention is *BDNF* gene.

ETIOLOGY

- **COMORBID MEDICAL ILLNESS-**

-Any medical illness may be a precipitating factor for depression.

-Conversely, depression may increase the likelihood of negative outcomes (including mortality) in physical illness.

ETIOLOGY

- Medical illnesses associated with depression-

-cerebrovascular disease -1/3rd pts

Infections

-Endocrine disorders diabetees -20%

-Malignancy

-Cardiovascular disease 25%

-PD

-Malnutrition

-Dementia

-Vitamin B12 deficiency

ETIOLOGY

- CARDIOVASCULAR DISEASE-

-Of patients who have had a myocardial infarction or who are undergoing angiography 25 % have minor depression & 25 % have major depression.

-*Hypertension* has also been associated.

ETIOLOGY

- CEREBROVASCULAR DISEASE-

-Depression develops in one third of patients who have survived ischaemic *stroke*.

-There is evidence that CVD predisposes to, precipitates depression in late life and a specific syndrome of *vascular depression* has been suggested.

ETIOLOGY

- Evidence to support this includes:

- Co-morbidity of depression, cerebrovascular lesions and cerebrovascular risk factors.

-Association between late life depression and MRI changes in deep white matter, periventricular white matter and subcortical grey matter.

ETIOLOGY

-Correlation between both functional impairment in depression and poor response to antidepressant treatment, and white matter changes.

-The pattern of clinical features is different from that in non-vascular depression.

ETIOLOGY

- ENDOCRINE DISORDERS-

-Thyroid and parathyroid disorder, Cushing's disease may all cause a depressive syndrome.

-The prevalence of depression in *diabetic patients* is approximately 20 %.

ETIOLOGY

MEDICATIONS-

Many drugs are associated with depression-

Psychiatric drugs	Benzodiazepines, mood stabilisers
Cardiovascular medication	Antihypertensives – clonidine, methyldopa, beta-blockers, calcium-channel blockers, ACE inhibitors, reserpine. Some evidence for statins
Gastrointestinal drugs	H2 receptor antagonists e.g. cimetidine
Hormones	Oestrogens, progesterone, selective oestrogen-receptor modulators
Oncology medication	Tamoxifen, vinblastine, vincristine
Analgesics	NSAIDs
Others	Steroids Antiparkinsonian drugs Some antibiotics Alcohol and substance misuse

ETIOLOGY

- **B. PSYCHOLOGICAL-**

-Cognitive impairment

-Personality disorder

-Insomnia

ETIOLOGY

- **C. SOCIAL-**

-Social isolation

-Lower SE status

-Relocation

-Disability

-Bereavement

PATHOPHYSIOLOGY

- Numerous pathophysiological mechanisms are there.

- These include:-

-**Serotonergic depletion**- *A decline in serotonergic activity occurs between youth and* middle age.

-**Endocrinological changes**- for example, decline in serum testosterone.

PATHOPHYSIOLOGY

- **Abnormalities of frontostriatal circuitry.**

- **Abnormalities of the amygdala and hippocampus**, which may be related to both aging and hypercortisolaemia.

CLINICAL FEATURES & DIAGNOSIS

- The presenting symptoms may be different in older depressed patients from those seen in younger adults.

- Because there is an increased emphasis on somatic complaints in older persons.

CLINICAL FEATURES & DIAGNOSIS

- The common signs and symptoms of depressive disorders include-

-Reduced energy and concentration

-Sleep problems (especially early morning awakening and multiple awakenings)

-Decreased appetite

-Weight loss

CLINICAL FEATURES & DIAGNOSIS

-Somatic complaints

-Hypochondriasis

-Low self-esteem

-Feelings of worthlessness

-Suicidal ideation

CLINICAL FEATURES & DIAGNOSIS

-Anxiety

-Cognitive impairment

-Psychomotor agitation (agitated depression)

-Psychotic symptoms.

CLINICAL FEATURES & DIAGNOSIS

- C/F in vascular depression in elderly-

-Greater disability and cognitive impairment

-Pronunced cognitive impairment in terms of verbal fluency and object naming.

-Prominent symptoms of apathy, retardation, lack of insight.

-Relatively lower prevalence of agitation & guilt.

CLINICAL FEATURES & DIAGNOSIS

- **COGNITIVE IMPAIRMENT IN DEPRESSION-**

-Cognitive impairment in depressed geriatric patients is referred to as ***the dementia syndrome of depression (pseudodementia), which can be confused easily with true dementia.***

- They are less likely to have a family history of depression or a history of depression in younger adult life.

DEMENTIA AND DEPRESSION

- Those who experience cognitive impairment in depression in old age are likely to develop dementia within a few years of the onset of depression.

- Depression in early life is also a risk factor for dementia.

DEMENTIA AND DEPRESSION

- Depression in dementia is associated with:-

-Impaired activities of daily living and more rapid decline in function

-Lower quality of life in general

-Increased probability of physical aggression

-Higher likelihood of transfer to nursing home care.

BEREAVEMENT & DEPRESSION

- Bereavement refers to the reaction or process that results after the death of someone close.

- At the end of the 2nd year after loss, 14% of the bereaved individuals have major depression.

BEREAVEMENT & DEPRESSION

- Bereaved elderly individuals who do not meet criteria for MDD often have significant depressive symptoms.

- The lines between abnormal grief, normal grief and MDD are not always clear(Shear & Shair 2005; Shuchter & Zisook 1993; Silverman et al. 2000)

BEREAVEMENT & DEPRESSION

- **FEATURES S/O DEPRESSION RATHER THAN NORMAL GRIEF-**

-Feelings of guilt not related to events surrounding the death of the loved one.

-Thoughts of death that are not related to the deceased.

-Preoccupation with feelings of worthlesness

BEREAVEMENT & DEPRESSION

-Psychomotor retardation

-Prolonged & marked functional impairment

-Hallucinatory experiences (other than image or voice of deceased)

DEPRESSION- EXECUTIVE DYSFUNCTION SYNDROME

- It is defined as the major depression with significant impairment in executive function.

- It involves the fronto-striato-limbic networks.

- NTs involved are-
  -GABA
  -Enkephalins
  -Dopamine
  -Acetylcholine

DEPRESSION- EXECUTIVE DYSFUNCTION SYNDROME

- Characterized by-

-Psychomotor retardation

-Reduced interest in activities

-Disability disproportional to the severity of depression

-Poor response to antidepressants

TREATMENT

- Geriatric depression can be effectively treated with psychotherapy, pharmacotherapy, or both.

- The objectives of geriatric depression treatment include-

  (1) remission of depression

  (2) reduction in the risk of relapse and recurrence

TREATMENT

(3) improvement of cognitive and functional status,

(4) development of skills or provision of supports needed for coping with handicaps and psychosocial adversity

TREATMENT

- The evaluation should include assessment of-

  -Psychopathology

  -Medical and neurological status

  -Functional impairment

  -Psychosocial stressors

PSYCHOTHERAPY

- The psychological therapies with the largest evidence base in the elderly are:

-Cognitive behavioural therapy (CBT)

-Problem-solving therapy

-Interpersonal therapy.

PHARMACOTHERAPY

- Elderly patients *benefit from the same psychopharmacological agents as younger patients*.

- 4 families of antidepressants are available for the treatment of geriatric depression. These are-

-SSRIs

-TCAs

-MAOIs

-ATYPICAL Antidepressants

PHARMACOTHERAPY

- Require 8 to 12 weeks to achieve full remission.
- The minimal length of antidepressant trial should be 3 to 4 weeks before switching to another antidepressant or using an augmentation agent.

PHARMACOTHERAPY

- **SSRIs-**

-SSRIs are used as drugs of first choice.

-SSRIs are equally effective as TCAs in the acute treatment of depression.

-The doses of SSRIs should be increased gradually in elderly.

PHARMACOTHERAPY

The starting daily doses-

-Fluoxetine, paroxetine- 10 to 20 mg

-Citalopram, escitalopram- 5 to 10 mg

-Sertraline- 25 to 50 mg

PHARMACOTHERAPY

-**Drug interactions should be considered** in elderly patients receiving SSRIs.

-**SNRI, venlafaxine-XR (extended release) leads to high remission rates**.

PHARMACOTHERAPY

- Venlafaxine is effective in-

  -hospitalized depressed patients

  -drug-resistant depressive patients

  -depressed patients with chronic pain

- Daily doses of **112.5 to 225** mg are adequate for the majority of elderly patients.

PHARMACOTHERAPY

- **TCAs-**

-The secondary amines nortriptyline and desipramine are the most frequently used tricyclic antidepressants in geriatric depression.

PHARMACOTHERAPY

-They have lower anticholinergic and sedative effects than do the tertiary amines amitriptyline, doxepin, and imipramine.

-**Nortriptyline appears to have a lower potential for orthostatic hypotension** than do other tricyclic antidepressants

PHARMACOTHERAPY

- **MAO INHIBITORS-**

-Low doses of MAO inhibitors—for example, phenelzine 30 to 45 mg daily or tranylcypromine 20 to 30 mg daily—should be used in the elderly.

-Orthostatic hypotension is the most frequent important side effect of MAO inhibitors.

PHARMACOTHERAPY

- **OTHER ANTIDEPRESSANTS-**

-There is limited research information on the use of bupropion in the elderly.

-Most elderly patients require 150 mg of bupropion twice daily.

PHARMACOTHERAPY

-**Mirtazapine has been increasingly used in frail, depressed nursing home patients with anorexia.**

-The starting dose of mirtazapine is 15 mg and should be administered at bedtime to reduce sedation.

-Daily doses up to 30 to 45 mg are sufficient as a rule for the treatment of late-life depression.

ECT

- Severe depression with high risk of suicide
- Poor response to drug treatment
- Life-threatening food/fluid refusal
- Psychotic features

ECT

- Geriatric patients require **a longer time to recover their memory than younger adults, especially after bilateral ECT.**
- Moreover, geriatric patients sometimes develop **prolonged confusion** after ECT.
- The **increase in falls with ECT** has been reported as up to 15% of elderly patients

T/T OF BEREAVEMENT

- Depends on the severity of symptoms.
- If MDD develops during the bereavement period- antidepressant treatment.
- Bereaved persons with depressive symptoms that does not meet criteria for MDD- brief focused psychotherapy or interpersonal therapy

T/T OF NON PSYCHOTIC DEPRESSION

- A combination of antidepressants and psychotherapy, regardless of severity.
- In minor depression- watchful waiting for at least 2 weeks or a trial of psychotherapy

T/T OF NON PSYCHOTIC DEPRESSION

- In mild major depression & for persistent minor depression- SSRI + psychotherapy is the TOC

- ECT- In patients who failed to respond in adequate antidepressant trials or who have severe depression with high suicide risk.

T/T OF PSYCHOTIC DEPESSION

- Antidepressants -SSRIs or venlafaxine-XR and atypical neuroleptics (except clozapine).

- ECT is another option, especially if combination drug treatment fails.

T/T OF DEPRESSION IN DEMENTIA

- In patients with major depression & mild to moderate dementia- **TOC is combination of an antidepressant with psychosocial intervention**.

- Among antidepressants - citalopram, sertraline & venlafaxine are first-line choices

COURSE & OUTCOME

- 13 to 19% - relapse/recurrence at 1 year
- 15%- relapse rate was observed in patients receiving controlled antidepressant treatment
- 35% with MDD & 52% with dysthymia experienced a chronic course.

COURSE & OUTCOME

- Among subjects with clinically significant depressive symptoms-

  23%- improved

  44%- unfavourable but fluctuating course

- Comorbid depression is associated with less favourable prognosis.

DYSTHYMIA IN ELDERLY

DYSTHYMIA

- In dysthymia low intensity symptoms of depression are present for two years or longer.

- These patients may appear generally dissatisfied with life but do not meet the criteria for diagnosis of a depressive episode.

DYSTHYMIA

- In elderly, a subsyndromal phase of up to three years may precede depression.
- The prevalence rates of dysthymia in the elderly are lower than in younger adults.
- In the community its 2% and 10 % in primary care.

DYSTHYMIA

- Geriatric dysthymia appears to have less associated psychiatric comorbidity and closer links to severe life stresses, particularly medical illnesses.

- T/T includes- SSRI + psychotherapy

- Significant superiority for fluoxetine.

BIPOLAR AFFECTIVE DISORDER IN ELDERLY

EPIDEMIOLOGY

- Only **10** % of all cases of BPAD present after the age of 50.

- Many patients presenting with their first manic episode in old age had a depressive episode in middle or late life.

EPIDEMIOLOGY

- The one-year prevalence rate in those aged 18–44 is 1.4 %

  -decreasing to 0.4 % in the 45–64 years group and

  -0.1 % in the over 65s.

- The male:female ratio in the elderly is 2:1.

ETIOLOGY

- The aetiology of late-onset bipolar disorder has been less extensively investigated.
- Although there are likely to be similarities as in adult population.
- Elderly people who present with their first episode of mania have a high chance of underlying neurological disorder (e.g. Stroke).

ETIOLOGY

- Cerebrovascular changes may contribute to mania in later life in much the same way as in depressive episodes.

- MRI scans in elderly patients with mania show-

  - a high prevalence of deep white matter and subcortical ischaemic changes.

- Mania can be induced by a number of different drugs.

CLINICAL FEATURES

- In mania-

-Elevated mood
-Irritability
-Inflated self-esteem
-Grandiosity
-Energy levels are increased

CLINICAL FEATURES

-Speech is often fast and pressured
-Sleep is reduced
-Spend large amounts of money
-Reckless behaviour
-Distractibility
-Psychotic features

- Greater degrees of irritability and less euphoria than in young adults.

MANAGEMENT

- There are few randomised controlled trials of specific drugs in the management of BPAD in the elderly.

- Geriatric patients with mania should be examined for drugs and medical or neurological diseases that can predispose to or precipitate mania.

MANAGEMENT

- In principle, the management of mania in elderly patients is similar to that in younger patients.
- Regulation of mood is accomplished by- use of mood-stabilizers & principles of their use follow guidelines for younger
- Agitated hyperactive elderly manic pts or those who are psychotic or with impaired sleep may be helped by treatment with neuroleptics.

MANAGEMENT

- **LITHIUM-**

-Lithium is the best-investigated drug in geriatric mania.

-It is widely used as a first line treatment in the elderly in acute mania and in prophylaxis of manic and depressive episode.

MANAGEMENT

-Age-associated decline in renal clearance in elderly patients leads to high lithium plasma levels even when low doses are used.

-Lithium should be introduced slowly, starting with daily doses of 150 mg.

-About one half of the dose required for young adults is sufficient for the elderly

MANAGEMENT

- **VALPROATE-**

-It is widely used in the treatment of acute mania and also in prophylaxis of affective episodes.

-There is no evidence that it is superior to lithium or antipsychotics in elderly bipolar patients but it is generally well tolerated in older people.

MANAGEMENT

- **ANTIPSYCHOTICS-**

-Antipsychotic drugs are widely used in the treatment of mania in young adults.

-The elderly are more susceptible to side effects than younger people.

MANAGEMENT

-Risperidone, olanzapine, quetiapine and aripiprazole all appear to be effective in treating mania.

-But there are few studies of their use in elderly manic patients.

MANAGEMENT

- **OTHER DRUGS-**

-Agitated manic elderly patients can be treated with low doses of lorazepam.

-Effective alternatives to lorazepam are atypical and high-potency neuroleptics in oral (e.g., risperidone 1 to 2 mg, olanzapine 5 to 10 mg daily) or injectable (e.g., haloperidol 0.5 to 5 mg daily) form.

MANAGEMENT

- **ECT-**

-ECT is sometimes used in the treatment of severe or prolonged manic or depressive episodes where other treatments have not been effective or where the condition is life-threatening.

MANAGEMENT

An approach to pharmacological management of BPAD in the elderly-

Indication	First line pharmacological treatments
Manic, hypomanic or mixed episode	Lithium/valproate/atypical antipsychotic
Depressive episode	Antidepressant and mood stabiliser. Stop antidepressant when symptoms resolve
Rapid cycling	Valproate with or without lithium
Prophylaxis	Lithium/valproate

COURSE & PROGNOSIS

- Overall mortality is increased in elderly people with BPAD.

- Admissions may occur more frequently and it seems that manic episodes are followed more rapidly by depressive episodes.

COURSE & PROGNOSIS

- There is little data available regarding the natural history of late-onset BPAD.

- But outcome will be dependent at least in part on adherence to medication and appropriate treatment of co-morbid medical conditions.

THANK YOU....