

2.3.2 Depression (*Mano-avasāda*)

Introduction

Depression is a common mental disorder, characterized by sadness, loss of interest, pleasure, feeling of guilt or low self worth, disturb sleep, poor appetite, low energy and poor concentration⁹. It is a common mood disorder in elderly and contributes to significant psychological and physical distress, physical disability and higher mortality. Depression is not a normal part of ageing.

Many elderly individuals face difficult changes such as - the death of a spouse or chronic medical problems that can lead to depression. Depression not only prevents from enjoying life like they could be, it also takes a heavy toll on death. Untreated depression poses serious risks for older people including illness, alcohol, drug abuse and even suicide.

International studies, including those in India suggest uniform prevalence of mood disorders across the world. Life time risk for major depression ranges from 2-25% with most authorities agreeing to a range of 10-15%. It is about 10% in men and 20% in women. By 2020, the World Health Organization (WHO) expects Depression to be the second frequent cause of morbidity world over¹⁰.

Aetiology

1. Family history of depression/ hereditary
2. Trauma and stress caused by things like financial problems, breakup of a relationship or death of a loved one can cause depression
3. Pessimistic personality with low self-esteem and a negative outlook are at higher risk of becoming depressed
4. Medical illnesses such as stroke, heart attack, cancer, parkinson's disease, and hormonal disorders can cause depressive illness
5. Many medications such as steroids, pain killers, anti-hypertensive drugs, tranquilizers, cancer drugs, hormones etc. can trigger or exacerbate depression
6. Psychological disorders like Anxiety disorders, eating disorders, schizophrenia, substance abuse etc.
7. Living alone can result in depression



Risk factors

1. Family history
2. Female gender
3. Death of dear ones
4. Functional disability due to chronic illness
5. Substance abuse of alcohol and drugs
6. Cognitive impairment
7. Sleep disorders

Pathogenesis

By advancing age, Acetylcholine, dopamine and norepinephrine decrease in the CNS; elevated levels of mono amine oxidase (MAO) and decrease in number of neuro-receptors with increased resistance to diffusion of drugs contribute to the vulnerability to depression in older adults.

Clinical features

1. Mood variations; often worse in the morning, improving later in the day
2. Change in sleeping, eating habits or appetite
3. Weight gain or weight loss
4. Feeling of guilt and/ or hopelessness
5. Slowed thoughts, speech and movement
6. Negative thoughts, blaming self and low self-esteem, thoughts of death / suicide
7. Complaints that have no physical cause (somatic complaints) such as unexplained aches and pains
8. Short temper, feeling of anxiety
9. Tearfulness for no reason, unrealistic sense of failure
10. Lack of concentration and difficulty in making decisions
11. Feeling of loneliness
12. Reduced desire for sex



Diagnosis

Before being diagnosed with depression, elderly adults should be screened for the following common health issues that can affect mood

1. Anxiety disorders
2. Personality disorders
3. Vit B₁₂ deficiency
4. Hypothyroidism
5. Systemic malignancies
6. Nutritional deficiencies
7. Metabolic disorders including diabetes and hepatic dysfunction

Investigations

1. Neurological examination
2. Mini mental status test
3. Geriatric depression scale (GDS) (Yesavage)
4. Haemogram
5. Blood sugar
6. Blood urea and nitrogen
7. Serum creatinine
8. Liver Function Test
9. Serum Vitamin B₁₂
10. Serum T₃, T₄, TSH

Management approaches

a. Prevention

1. Use of fiber rich food like whole grams, whole fruits, fresh vegetables, *āmalakī* (*Phyllanthus emblica* Gartn.), etc.
2. Be active physically and mentally and practice regular exercise



3. Engage in social activities and avoid loneliness
4. Continue medication as per instructions
5. Practice *yoga* and meditation
6. Avoid non-vegetarian diet, frequent eating and high calory food
7. Avoid excessive thinking

b. Medical management

Line of treatment

1. ***Nidāna parivarjana* (avoidance of aetiological factors)** - To treat the depression, factors like trauma, use of steroids, pain killers, etc. should be avoided. Chronic illness if any should be treated first and living alone should be avoided.
2. ***Samśodhana cikitsā*** (Bio-cleansing therapies) followed by *Śamana cikitsā* (Palliative therapy) should be advocated.
 - i. *Snehapāna* (Internal oleation) - *Kalyāṇaka ghṛta* 50 ml with 2 gm *Saindhava lavaṇa* for 3 - 7 days (for *Sadya Snehana*)
 - ii. *Virecana* (Purgation) with *Eraṇḍa taila* 10 - 20 ml or *Tṛvṛt cūrṇa* 5-10gm with half glass of milk at night
 - iii. *Nasya karma/ Bṛṃhana nasya* with *Purāṇa ghṛta* (old ghee)/ *Aṇu taila/ Mahākalyāṇaka ghṛta* 8-8 drops in both nostrils for 7 days
 - iv. *Śiro vasti* with *Nārāyaṇa taila* daily 45 minutes for 7 days
 - v. *Śirodhārā* with medicated oils (*Nārāyaṇa taila / Candanādi taila/ Himasāgara taila*) (or) *Kṣīra dhāra / Jala dhāra / Takradhāra* daily 30-90 minutes for 1-2 weeks
 - vi. *Śiro abhyāṅga* (head Massage) with medicated oils (*Brāhmī taila*) etc.
3. Drug therapy

Drug	Dosage (per dose)	MOA ^s / Vehicle	Duration*
<i>Aśvagandhā (Withania somnifera Dunal) cūrṇa</i>	3 gm	Water	15 days
<i>Jaṭāmāṃsī (Nardostachys jatamansi DC.) cūrṇa</i>	1-2gm	Milk	15 days



<i>Kapikacchu (Mucuna pruriens Hook) cūrṇa</i>	2-4 gm	Water	15 days
<i>Brāhmī (Bacopa monnieri Linn.) svarasa</i>	5-10 ml	Water	15 days
<i>Maṇḍūkapaṇḍī (Centella asiatica (Linn.) Urban.) svarasa</i>	5-10 ml	Water	15 days
<i>Guḍūcī (Tinospora cordifolia (Willd.) Miers) svarasa</i>	5-10 ml	Water	15 days
<i>Kūṣmāṇḍa (Benincasa hispida) svarasa</i>	5-10 ml	Sugar	15 days
<i>Śaṅkhaṣṭī (Convolvulus pleuricaulis Choisy) kalka</i>	2-4 gm	Water	15 days
<i>Tagara (Valeriana wallichii DC) cūrṇa</i>	1-2gm	Water	15 days

COMPOUND FORMULATIONS

Drug	Dosage (per dose)	MOA ^s / Vehicle	Duration*
<i>Brāhmī vaṭī</i>	250-500 mg	Honey	15 days
<i>Mānasa mitra vaṭaka</i>	125 mg	Milk	15 days
<i>Mahākalyāṇaka ghṛta</i>	6 gm	Luke warm water	15 days
<i>Brāhmī ghṛta</i>	6-12 gm	Luke warm water	15 days
<i>Kalyāna ghṛta</i>	6 gm	Luke warm water	15 days
<i>Sārasvatāriṣṭa</i>	10-20ml	Water	15 days
<i>Aśvagandhāriṣṭa</i>	10-20ml	Water	15 days
<i>Brāhma rasāyana</i>	10 gm thrice daily	Milk	15 days
<i>Candanādi taila</i>	for <i>śirodhārā/ śirovasti</i>	-	15days
<i>Himasāgara taila</i>	for <i>śirodhārā/ śirovasti</i>	-	15days



<i>Nārāyaṇa taila</i>	for <i>śirodhārā/</i> <i>śirovasti</i>	-	15 days
<i>Brāhmī taila</i>	for head massage	-	15 days

§MOA - Mode of administration

*Initially 2 times in a day after meal for 15 days followed by condition of patient and physician's direction

NOTE: Out of the drugs mentioned above any one of the drug or in the combination may be prescribed by the physician. The duration of the treatment may vary from patient to patient. Physician should decide the dosage (per dose) and duration of the therapy based on the clinical findings and response to therapy.

c. Yogic Practices: The following *yogic* practices are beneficial in Depression; however, these should be performed only under the guidance of qualified *Yoga therapist*. Duration should be decided by the *Yoga therapist*.

1. *Padmāsana, Śavāsana, Sūryanamaskāra, Bhujāṅgāsana, Pascimottānāsana, Sarvāṅgāsana*
2. *Prāṇāyāma (Kapālabhāti, Bhastrikā, Sūrya anuloma viloma)*
3. Meditation, etc.

Following sequence is to be followed

1. *Sūkṣma vyāyāma* (loosening exercise)
2. *Āsanā*
3. *Prāṇāyāma*
4. Deep relaxation technique
5. Meditation -*Nāda anusandhāna*

Counselling - Advice the patient to

1. Spend time with loved once
2. Take diet rich in antioxidants
3. Take green vegetables and yellow fruit (Vitamin B₁, B₂, B₁₂ and Biotin) in sufficient quantity
4. Take low fat diet



5. Practice *yoga*, meditation and exercise regularly
6. Be active and happy always
7. Participate in *satsaṅga* (association with virtuous people)
8. Visit of religious places
9. Avoid driving lonely

Indications for referral

1. Suicidal tendency
2. Complicated cases
3. Non-responsive to medication

COSTING DETAILS

Approx. Costing of Depression Management

S.No.	Medicine	Requirement	Unit	Rate in Rs.	Cost in Rs.
1.	<i>Aśvagandhā cūrṇa</i>	150	gm	0.48	72
2.	<i>Jaṭāmāṁsī cūrṇa</i>	15 - 30	gm	1.0	15 - 30
3.	<i>Kapikacchu cūrṇa</i>	60-120	gm	1.0	60-120
4.	<i>Brāhmī svarasa</i>	150-300	ml	0.75	112.5-225
5.	<i>Maṇḍūkarnī svarasa</i>	150-300	ml	0.75	112.5-225
6.	<i>Guḍucī svarasa</i>	150-300	ml	0.75	112.5-225
7.	<i>Śaṅkhaṣpī kalka</i>	60-120	gm	0.75	45-90
8.	<i>Tagara cūrṇa</i>	60-120	gm	1.2	72-144
9.	<i>Kūṣmāṇḍa svarasa</i>	150-300	ml	0.1	15-30
10.	<i>Mānasa mitra vaṭaka</i>	3.75	gm	5.73	22
11.	<i>Brāhmī vaṭī</i>	7.5-15	gm	4.4	33-66
12.	<i>Kalyāṇa ghrta</i>	180	gm	0.46	83



13.	<i>Mahākalyāṇaka ghṛta</i>	180	gm	0.67	121
14.	<i>Brāhmī ghṛta</i>	180-360	gm	0.45	81-162
15.	<i>Sārasvatāriṣṭa</i>	300-600	ml	0.28	84-168
16.	<i>Aśvagandhāriṣṭa</i>	300-600	ml	0.152	46-92
17.	<i>Brāhma rasāyana</i>	450	gm	0.197	89
18.	<i>Candanādi taila</i> (for <i>śirodhārā/ śirovasti</i>)	1200-1500	ml	0.32	384-480
19.	<i>Himasāgara taila</i> (for <i>śirodhārā/ śirovasti</i>)	1200-1500	ml	0.55	660-825
20.	<i>Nārāyaṇa taila</i> (for <i>śirodhārā/ śirovasti</i>)	1200-1500	ml	0.51	612-765

Approx. costing of *Pañcakarma* procedures in Depression **

S.No.	<i>Pañcakarma</i> procedure	Days	Rate in Rs./ day	Cost in Rs.
1.	<i>Nasya karma</i>	7	100	700
2.	<i>Śirovasti</i>	7	300	2100
3.	<i>Śirodhārā</i> (with taila)	14-21	300	4200-6300
4.	<i>Śirodhārā</i> (with milk)	14-21	150	2100-3150
5.	<i>Jala dhāra</i>	14	150	2100
6.	<i>Takra dhāra</i>	7-14	150	1050-2100

