

MANOVIKARA (Mental disorders) IN AYURVEDA

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ABSTRACT: *An attempt is made to project at one place the available Ayurvedic material on manas and treatment of manovikara in an orderly manner which would be both easy to understand and rewarding in the field of treatment, by describing the definition of manas, its functions, qualities, concept of psychosomatics, classification of mental disorders, treatment of mental illness prevention of mental illnesses, method of examination of mental illness and other important aspects.*

Introduction

Ayurveda aims at preservation and promotion of health, and prevention and cure of diseases through the concepts of positive physical and mental health. Management of mental disorders or psychological medicine was an area of specialization even during Caraka's time (500 B.C.)⁽¹⁾. Caraka suggests that, treatment for mental illnesses should be sought through an expert in the field of mental illnesses⁽²⁾. Chakrapani (11 A.D.)⁽³⁾ commenting on this statement, uses the phrase 'manasaroga bhesaja veti'⁽⁴⁾ (Knowers of treatment for mental illnesses). These references fortify the above statement. But unfortunately, due to historical reasons, Ayurvedic literature dealing exclusively with manas and manasavikara, are not available.

However, the scattered aphoristic material related to manas and manasavikara as available in the Ayurvedic treatises are richly useful in understanding manas and treating mental disorders only if they are

carefully collated in view of our present needs. It is also a fact that various mental disorders are being treated for centuries over, by Ayurvedists with the help of these ancient literary descriptions.

Ayurvedic Research Unit of the Central Council for research in ayurveda and Siddha, New Delhi, located at the National Institute of Mental Health and Neuro Sciences, Bangalore, has been studying from 1971 the role of Ayurveda in understanding and the management of various mental disorders.

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In the following lines, it is attempted to delve systematically on some of the important aspects of manas and manovikaras described in ayurveda.

Ayurveda and Psychosomatics:

Ayurveda has duly recognized the individuality of manas (psyche) and sarera (body) and their inseparable and interdependent relationship in a living body. The following descriptions available in the classics of Ayurveda, bear proof to this statement.

While defining 'Ayu it is said that 'life is the combined state of body, senses, mind and soul ⁽⁵⁾. Further, the expectant parents are advised to contemplate on the physique, complexion, and mental traits they wish to have in their child, in support of their desire,⁽⁶⁾.

Indicating the influence of manas even at the embryonic stage, Ayurveda states that 'the foetus grows steadily with the help of the reproductive element, the five protoelements namely, prthvi, Ap, Teja Vayu and Akasa, the subtle mind and sap of food taken by mother ⁽⁷⁾.

The statement that 'manifestation of manas occurs during 5th month of pregnancy in the foetal body' indicates the coexistent nature of mind and body ⁽⁸⁾.

Indicating the direct influence of manas on certain physiological functions, it is said that anger, and fear could cause diaphoresis⁽⁹⁾.

Similarly grief and anger are counted among the causes of the loss of breast milk⁽¹⁰⁾.

Describing the role of manas in the digestion of food consumed, Ayurveda advises that food should be consumed with rapt attention. Defying this, is liable to allow the food go wrong way or injure the

health or the food is not properly placed in the stomach and there is no appreciation of either the good or bad qualities of food taken ⁽¹¹⁾. Further, indicating the need of mental poise for drug action Ayurveda says that no one who has not rid oneself of the evils of both mind and body beginning with the gross ones, can ever expect to reap the benefits resulting from vitalization therapy.

Vayu which is one of the tridoshas (the three bioentities viz., Vata, Pitta and Kapha which are generally more related to shareera) is said to be the controller and prompter of manas. It is also said that the excited vayu depresses mind, gives rise to fear, grief, stupefaction, feeling of helpness, delirium etc.

These descriptions enable one to conclude that Ayurveda is perhaps the earliest system of medicare to have certain clear concepts about the psychosomatics.

Manah Swaroopa: (Concept of mind):

According to caraka, 'that entity which is responsible for thinking is known as manas'⁽¹³⁾. It is said to have been inherited from the previous birth and evolved from the compination of vaikarika and tejasa ahankara⁽¹⁴⁾. It is acetana (inactive) by itself but gets cetana (activeness) from atma (soul) ⁽¹⁵⁾. It is called a dravya (substance) ⁽¹⁶⁾. Although beyond sensory perceptions, it is called so since it has got both action and quality, coexistent within itself ⁽¹⁷⁾. It is connected to both jnanendriya (sensory centres) and karmendriya (motor centres). That is why it is called Ubhayatmaka (combined psychomotor entity) ⁽¹⁸⁾.

Manovijnana (understanding of mind):

Manas is understood by its actions which are, indriyabhigraha (sensory and motor perceptions and control), svasyanigraha (self-control), uha (speculation), and vicarya (thinking) ⁽¹⁹⁾. Its objects are those, which are chintya (thought about), vicarya (discriminated from), uhya (speculated upon), dhyeya (aimed at), and sankalpya (decided upon) ⁽²⁰⁾.

Manoguna (qualities of mind):

Manas has two basic qualities viz., anutva (atomic nature) and ekatva (unitary nature) ⁽²¹⁾. But it is difficult to understand these qualities directly and clearly. Therefore, manas is said to be constituted of 3 more operational qualities viz., stave, rajas and tamas. These are understood by the role they play in the emergence of three different mental response patterns. For example, satwa or kalyana bhaga is understood by self control, knowledge discriminative ability, power of exposition, etc. Rajas or rosabhaga is understood by violence, despotic envy, authoritativeness, self adoration, etc. tamas or moha bhaga is understood by dullness, non-action, sleep etc ⁽²²⁾.

Manasthana (location of mind):

Manas is said to be active throughout body except nail ends, hairs, and such other structures ⁽²³⁾. Its seat of control is said to be between siras (head) and talu (hard palate) ⁽²⁴⁾. Also it is said that siras is the seat of all senses ⁽²⁵⁾. Since the senses are controlled by manas, it is necessary to consider siras in understanding manas. Similarly Hridaya

(heart) is also said to be the seat of chetana or atma ⁽²⁶⁾. Since manas is always associated with atma and different emotions generally influence blood circulation, consideration of hridaya will also be important while studying manas.

Jnanotpatti (mechanism of knowledge):

Manas indicates both presence and absence of cognition ⁽²⁷⁾. Knowledge occurs when the sequential relationship in the order of indriyarth (sensory objectives), indriya, (sense organ), and manas with atma (soul) is established ⁽²⁸⁾.

Manasaroga Samprapti (pathogenesis of mental disorders)

Generally for all types of mental disorders, alpasatwa (weak mind), manovahasrota (channels conveying manas/conveyers of manas), manasadosha viz., Rajas and Tamas and tridosha viz., Vata, pitta and Kapha are said to be responsible, according to ayurveda ^(28-a). Alpasatwa which is the most important component is indicative of premorbid personality. Involvement of saririka dosa is more prominent in Ubhayatmaka vikara like unmade apasmara etc., than in manasavikara viz., kama, krodha, abhyasuya etc. similarly manadosa will be more vitiated in the latter group than in the former.

Manoroga Nidana (Aetiology of mental disorders):

Emotional disturbances, volitional transgression, unwholesome food are said to be the causes of mental disorders, in general.

Lakshana of Manasaroga (Symptoms of mental disorders):

For Ubhayatmaka vikara like unmada, apasmara, mada, murcha etc. symptoms and signs have been described in detail, in the texts. But for nanatmaja manasavikara and manasavikara or kevalamanasa vikara, no descriptive details are available regarding their symptoms. This may be because of the fact that these conditions are well understood by the terms used to describe them. For example, Krodha, soka, Udvega etc. However, it would be a rewarding exercise if each of these conditions is taken up separately and studied. Then it would also be possible to understand and record which are other psycho-physical signs/symptoms that are related to each of these conditions.

Manasavikara Vargeekarana (Classification of mental disorders):

The different types of disease classification found in the classics mainly pertain to the physical illnesses, no description on classification of manasaroga are readily available in the Ayurvedic works. Still, by studying the diseases wherein the manasa dosa viz., rajas (passion) and tamas (inertness) are involved, it is possible to classify and enumerate the mental disorders described in Ayurveda.

Diseases have been broadly classified into 3 broad categories viz., sarira vikara (physical diseases) like jvara (fever), atisara (diarrhoea), etc., manasavikara (mental disorders) like kama (desire), soka (grief), abhyasuya (jealousy) and others and ubhayatmaka vikara (diseases wherein both

body and mind are affected) like, unmada (psychosis), apasmara (epilepsy) and the like⁽²⁹⁾.

However, these arbitrary demarcations are made only for the clinical advantages. It is not possible to strictly categorise the diseases as physical, mental etc., since the diseases effect the living body which is a combination of sarira (body), indriya (senses), satwa (mind) and atma (soul),⁽³⁰⁾ wherein even if one of the is deranged, the remaining three are also affected.

It is said that in sariraka vikara, sareera gets affected first and the manas next. In manasika vikara namely, udvega (anxiety) kama, soka, abhyasuya etc., manas is affected initially and sarira later⁽³¹⁾. Since the involvement of manas will be predominant clinically they are also termed as manodhisthika (kevala manasa) vikara⁽³²⁾

Certain disorders like visada (depression), tama (withdrawal), asabdasravana (auditory hallucinations) and others, are caused exclusively by one of the three sarira dosas viz., Vata, Pitta, and Kapha. Some of them are comparable to certain neurotic conditions and some to affective disorders. These may be termed as nanatmaja manasa vikara⁽³³⁾.

In ubhayatmaka vikara like unmada, apasmara, madatyaya, etc., which are also termed as manassariradhisthita vikara, basically the sarira dosas are affected. But since mental disturbances are more prominently presented clinically, they are also termed as manovikara. These can also be called as anubandhajanamanasa vikaras.

Yet another group of diseases like sokaja atisara (diarrhoea caused by grief), bhayaja atisara (diarrhosa caused y fear) kamaja jwara (fever caused by lust), krodhaja jwara (fever caused by lust), krodhaja jawaa (fever caused by anger) and sokaja udavata and others, which are also ubhayatamaka vikara, are found in classics, these are caused due to

the initial impairment of rajas and tamas although clinically they are present as physical illnesses. They are relieved only when the manodosa are treated. Therefore, these diseases which refer to some of the somatised neurotic refer to some of the somatised neurotic conditions can also be considered under manovikara.

Thus, a critical study of the classics offer certain clinically useful descriptions pertaining to the classification of manasavikara in ayurveda. The classifications are depicted in the following table.

Table Showing Manasa Vyadhi (Mental disorders) Described in Ayurveda			
Manasavikara (neurosis)	Nanatmaja manasavikara	Ubhayatmaka manasavikara	Kamajwara (fever caused by passion)
Abhyasuya (jealousy): bhaya (fear), chittodvega (anxiety): dainya (meanness of inferiority complex), harsa (exhilaration) kama(desire); krodha (anger): lobha (greed): mada (arrogance): mana (pride): moha (confusion): soka (grief): visada (anguish): and irshya (envy).	Chittodvega (anxiety) visada (anguish)asabda sravana (auditory hallucinations) tama (withdrawal) atipralepa (prating) aswapna (insomnia) anavasthitacittatwa atrpti (discontentedness) tandra (stupor) atinidra (excessive sleep) bhrama (confusion) Ch. Su.20	Unmade (psychosis) Apsmara (epilepsy) Apatanaka, apatantaka (hysteria) atatwabhinivesa (obsessive syndrome): madatyaya (alcoholic psychosis): sanyasa (coma)	krodhaja jwara (fever caused by anger) bhayaja atisara(diarrhoea caused by fear) sokaja atisara (diarrhoea caused by grief)

MANAH PARIKSA (Mental examination)

As mentioned already, manas is a very subtle entity beyond sensory perceptions whereas the tools of clinical examinations are limited to sensory transactions only. Secondly, it is only the manas (with atma) which is the 'knower' and there is no other entity to 'know' this 'knower'. This situation makes the understanding and examination of manas very difficult. Therefore, the only way to understand it, is through its functions are reflected in the form of sila (habit, temperament, etc), ceta (psychomotor activity and acara conduct), which in turn are grosser sensory transactions. Here, the definition of Unmada put forth by Caraka becomes very useful. Unmada is defined as the unsettled condition of manah (mind), budhi (decision), smriti (memory), sanjnana (orientation and responsiveness), bhakti (desire), sila (habit and temperament), ceta (psychomotor activity), and acara (conduct).⁽³⁴⁾ Of these eight factors, the first five are the five different conceptual dimensions of manas which in turn are reflected through the later three.

The various clinical examination schemes like trividha pariksa, dasevidha pariksha and astasthan pariksa (threefold, tenfold and eight fold clinical examinations), and the nidanapancaka (the aetiodiagnostic factors) described in the classics do not apply with the same force while examining manasavikara as they do while examining physical diseases.

Caraka's description about the examination of certain mental aspects by anumana (inference) like, vijnana (understanding) by

vyavasaya (purposeful nature of action), dhairya (courage) by avisada (fortitude), rajas (passion) by sanga (strength of attachment), preeti (pleasure) by tosha (sense of satisfaction), soka (grief) by dainya (helplessness), bhaya (fear) by visada (anguish etc,⁽³⁵⁾ also appear very brief and hence inadequate.

In view of this situation this unit has prepared a detailed scheme of examination based on the Ayurvedic basic concepts and Caraka's definition of Unmada, which is diagrammatically depicted (annexure-I). In this scheme, the Ayurvedic meaning of each of the eight factors are laid down, and simple questions/tasks to be given to the patients considering their socio-economic, and cultural background, are suggested in order to elicit the state of these eight aspects, with provision for suitable modifications.

The descriptions available in the chapters on dinacharya (daily regimen), rtucharya (seasonal regimen), sadvrta (code of virtues, are grouped under sila, ceta and acara to aid the clinical elicitation of these aspects. Besides these, the patient's behavior during interview is observed and recorded. If the patient is non cooperative and not communicative due to his disease condition, his close relatives who are familiar with his premorbid nature and his disease conditions are interrogated in order to elicit the state of these eight aspects.

This scheme of mental examination is hoped to be of immense help particularly to the ayurvedists.

MANASAVIKARA CIKITSA (Treatment of mental disorders)

Ayurvedic treatment for the mitigation of the diseases has always been through ‘wholistic approach’ while it has only recently ushered in the west as big movement in the field of treatment.

Ayurveda recommends three types of chikitsa viz., daivavyapasraya chikitsa (divine or spiritual/therapy), yuktivyapasraya chikitsa (logical therapy), and satwavajaya chikitsa (psycho therapy), for treating mental illnesses as well. ⁽³⁶⁾. Let us examine them in brief.

1. Daivavyapasraya chikitsa: This refers to measure like mantra, (incantation), Ausadhi (wearing sacred herbs), mani (wearing precious gems), mangala (propitiatory rites), bali (oblations), homa (sacrifice), upahara (offerings), niyama (vows), prauascitta (ceremonial penitence), upavasa (fasts), swastyayana (prostrations), pranipata (surrender), gamana (pilgrimage), etc.⁽³⁷⁾. These measures are recommended in mental disorders caused by agantu(extraneous) factors and administered judiciously after considering the nature, faith, religiosity, culture and educational level, of the patient. (Ch. Shi. 9/93-4). These may be useful in all types of manasavikara, i.e. both psychosis and neurosis.
2. Yuktivyapasraya chikitsa: This refers to the use of ahara (diet) and oushadha (drugs).

Under ahara, it is interesting to note that different food articles like ksira (milk), ghrta (ghee), draksa (grapes), panasa (jack fruit), Brahmi (Centella asiatica- plant), mahishamamsa (buffalo meat), sarpamamsa (snake meat), kurmamamsa (tortoise meat), vastuka (goose foot, kakamaci (solanum nigirum), barhimamsa (cuckoo meat),

mahakusmanda ⁽⁴¹⁾ ash gourd) kapittha (wood apple) matulunga * and others are recommended as bebeficial in various mental disorders⁽³⁸⁾. *(Citrus medica).

Recently according to an Ayurvedic physician cuckoo meat is found to be useful in cartain mental disorders.⁽³⁹⁾.

Thus, these and other descriptions available in the classics on ahara particularly in relation to mental disorders are worthy of scientific study.

Under drug therapy, it is said that, in all types of mental diseases where vata, pitta and kapha are deranged, dosha shodhana or srota suddhi (elimination of dosha or shodhana or srota suddhi (elimination of dosha or cleansing, the cells) has to be done by adopting various sodhana (purificatory measures). When the cleaning is properly done, samanausadha (palliatives) and rasayana (tonics) are given in order to bring back the deranged manas to normalcy. ⁽⁴⁰⁾.

The following are some of the Ausadha (medicines), rasayana (tonics) and upakrama (treatment processes) that are being used in the Unit in treating various mental disorders.

Medicines	Tonics
1. Brahmi ghrta	1. Aswagandha
2. Kalyanakaghrta.	2. Kusmandarasayana
3. Pancagavya ghrta	3. Cyavanaprasa
4. Sarasvatarista	4. Brahmi Rasayana
5. Asvagandharista	5. Asvagandhavaleha
6. Sarasvata curna	6. Satavari leha
7. Smritisagara rasa	
8. Caturmukha rasa	
9. Manasamitra vataka	
10. Brahmyadiyoga	

11. Ksirabala taila
12. Dhanvantara taila
13. Asanabilvadi taila
14. Brahmi
15. Tagara
16. Vaca
17. Sarpagandha
18. Jatamamsi
19. Bala

Treatment processes:

1. Virecana (purgation)
2. Basti (enema)
3. Nasya (nasal instillation)
4. Abhyanga (aniling)
5. Takradhara/Ksiradhara/tailadhara, Kasayadhara (streaming of medicated buttermilk/milk/oil/decoction on the forehead of the patient)
6. Mastishka (application of medicated wet cakes on the head)
7. Sirolepa (application of medicated wet cakes on the vertex)

3. Satvavajaya chikitsa: The aim of this therapy is to restrain mind from desire for unwholesome objects ⁽⁴¹⁾. This permits considering, occupational, behavioural and like therapies as well, since the ultimate aim of them also would be to restrain mind from unwholesome objects.

Speaking on the role of the therapist, it is stated that, the therapist should be 'suhrt'⁽⁴²⁾ implying that he should be compassionate to the patient and involve himself in solving the problems of the patient. This clearly indicates the importance of the therapist if the therapy administered has to be beneficial to the patient. The best approach to achieve the

goal of satvavajaya chikitsa as mentioned earlier, is through jnanam (knowledge), vijnanam (analytical thinking), dhairya, (courage), smrti (memory), and Samadhi (concentration), according to Caraka ⁽⁴³⁾.

Mental disorders caused by kama (excessive desire) Soka (grief), bhaya (fear) krodha (anger), harsa (delight), irsyā (jealousy), moha (agreed) should be countered by inducing the opposite passion in order to neutralize the causative ones ⁽⁴⁴⁾.

The above two approaches can be said to be more useful in manasaroga caused on account of certain external psychological reasons which refer to certain manasavikara (kevala manasavikara) related to neurotic conditions.

Apart from these, measures like calming the patient with assurances and words of elation and moral import, shocking him by announcing the loss of something he holds dear or showing him some wonderment, threatening him by physical torture have been mentioned ⁽⁴⁵⁾. These are more useful in nanatmaja and manasariradhisthita manasavikara or certain psychotic conditions. The underlying principle is to create fear of physical torment which the patient may not like to bear, and fear of death, which is the strongest of all fears, in order to provide insight to the patient to regain mental equipoise. These are more applicable in excitatory conditions where disciplining that patient becomes unavoidable. Needless to add that these measures were told centuries ago considering the conditions that prevailed in that society. We may modify them suitably and perhaps find their underlying principles useful even today.

MANASAVIKARANUTPADANA

(prevention of mental disorders)

In support of its concepts on preservation and promotion of health and prevention of illnesses, ayurveda lays due stress on various measures to be adopted in order to promote mental health and prevention of health and prevent mental disorders. These measures find lucid descriptions in the chapters devoted to dinacarya (daily regimen) ritucarya (seasonal regimen), sadvrta (code of virtues), roganutpadana (prevention of diseases) and annapanavidhi (rules pertaining to food and dinks), in the classics of ayurveda.

In order to be free from mental disorders Ayurveda prescribes that one should not allow oneself to become a victim of impulses like greed, grief, fear, anger, jealousy, impudence, vanity etc.⁽⁴⁶⁾ Further, it declares that, one who speaks truth, refrains from over indulgence in alcohol and meat, hurts none, avoids overstrain, fair spoken, always compassionate and given to wholesome eating, would enjoy the benefits of sound mental health.⁽⁴⁷⁾

In fact it would only be appropriate to consider the Ayurvedic view points in this regard as a 'socio-moral value system' which if adopted with modifications to suit our needs without digressing from the core of these concepts, would be of great aid in warding off many a mental disorder, and promote the mental potentialities of mankind. It would also richly contribute

in preventing and , treating many psychosomatic conditions like peptic ulcer, bronchitis, blood pressure, eczema and diabetes to mention a few.

All these measures are aimed at bestowing relaxation and mental equipoise which are the basic prerequisites of a sound mind. They are particularly relevant to our times when we are forced to battle continuously against 'stress' and 'strain' for our very survival.

Summing up Vagbhata ⁽⁴⁸⁾ states that one who introspects daily once and reacts to fellow beings and surroundings dawn to dark would modify his behavior, remain free from grief, and enjoy perennial happiness.⁽⁴⁹⁾

ANNEXURE- I

Ayurvedic Scheme of Mental Examination – Diagrammatic Representation

1. Sila (Habits, Temperament etc.)
 - i) Habits
 - ii) Temperament
 - iii) Physiological functions
 - iv) Leisuretime activity
2. Chesta (Psychomotor activity)
 - i) General motor activity
 - ii) Speech
 - iii) Facial expression
 - iv) Posture
3. Acarah (Conduct)
 - i) Personal standards
 - ii) Social standards

4. Manaha (Mind)
 - i) Indriyabhigraha (Perception and Motor control)
 - ii) Manonigraha (mental control)
 - iii) Uha (guess)
 - iv) Vicara (Thought)
5. Buddhihi (Decision)
6. Smritih (Memory)
7. Samjnanam (Orientation and responsiveness)
 - i) Orientation to:
 - a. Desah (Place)
 - b. Kalaha (Time)
 - c. Atmajnana (person)
 - i) Responsiveness to external stimuli
8. Bhaktih (Desire) Desire in relation to:
 - i) Ahara (Food)
 - ii) Vyavaya (sex)
 - iii) Vesham (Dress)
 - iv) Ranjanam (Entertainment)
 - v) Anya (Others)

“Unmadam punarmanobuddhi
samjnanam smrti bhakti
Sila cestacara vibhramsam vidyat”
Ch Ni. 7.

REFERENCES

Dwivedi, V.N., “Ayurved Ki oushadhiya Va unka vargeekaran”, Institute for Ayurvedic studies and Research, Jamnagar, - 18. (1966)

Acharya, Y.T., “Charakasamhita”, Nirnayasagar Press, Bombay, 77. (1941)

1. As against 1.

2. Acharya, Y.T., “Charakasamhita”, Nirnayasagar Press, Bombay, 9 (1941).
3. Paradh, Harishastri, “Astanga Hriday” Nirnayasagar Press, Bombay, 368. (1939)
4. Ibid Page, 362.
5. Ibid page, 371.
6. Ibid Page, 259.
7. Ibid Page, 778.
8. Acharya, Y.T., “Charakasamhita”, Nirnayasagar Press, Bombay, 247.
9. Ibid Page, 79.
10. Ibid Page, 57.
11. Acharya, Y.T., “Charaka Samhita”, Nirnayasagar Press. Bombay, 338. (1938)
12. Acharya, Y.T., “Charakasamhita”, Nirnayasagar Press, Bombay, 294. (1941).
13. Ibid Page, 11.
14. Ibid page, 13.
15. Acharya, Y.T., “Sushrutasamhita”, Nirnayasagar Press. Bombay, 338. (1938)
16. Acharya, Y.T., “Charakasamhita”, Nirnayasagar Press, Bombay, 288. (1941).
17. Ibid, Page, 288
18. Ibid,
19. Ibid, Page, 323
20. Ibid, Page, 250

21. Shukla, G.D.,
“Bhelasamhita”,
Chowkhambha vidya
Bhavan, Varanasi, 157.
(1959)
22. Acharya, Y.T.,
“Charakasamhita”,
Nirnayasagar Press, Bombay,
716. (1941).
23. Ibid,
24. Ibid, Page, 288
25.Ibid, Page, 292.
- 27a. Ibid, Page, 468
26.Ibid, Page, 716.
27.Ibid, Page, 8.
28.Ibid, Page, 254.
29.Ibid, Page
30.Ibid, Page, 113&115.
31. a)Ibid, Page, 223.
b) Ramu, M.G., et al, “ An
approach to mental
examination based on
Ayurvedic concepts, CCRAS
New Delhi, 1981.
32. Acharya, Y.T.,
“Charakasamhita”,
Nirnayasagar Press, Bombay,
248. (1941).
33. Ibid, Page, 77.
34. Ibid,
35. a) Acharya, Y.T.,
“Sushrutasamhita”,
Nirnayasagar Press. Bombay,
227. (1938)
- b) Shastri Rajeswaredatta,
“Bhaishajya ratnavali”,
Chowkhambha Sanskrit
Series, Varanasi, 368. (1969)
- c) Mishra, Brehma Shankara
Shastri, “Chakradatta”,
Chowkhambha Sanskrit
series, Varanasi, 368. (1969)
- d) Acharya, Y.T.,
“Charakasamhita”,
Nirnayasagar Press. Bombay,
165&166. (1941)
36. Chatterjee-Acharya-
Paradhkar., “My experiments
with Cuckoo meat”, Journal
of Research in Indian
Medicine, Vol. VII, No.2, 79
to 81. (1972)
37. Acharya “Charakasamhita”,
Nirnayasagar Press, Bombay,
470. (1941).
38. Ibid, Page, 77.
39. Ibid, Page, 473.
40. Ibid, Page, 16.
41. Ibid, Page, 474.
42. Ibid, Page, 473 474
43. Ibid, Page, 50.
44. Ibid, Page, 383, 384
45. As against 1.
46. Paradhkar, Harishastri,
“Astangahridaya”
,Nirnayasagar Press,
Bombay, 34. (1939).

