A REVIEW ON AYURVEDA MANAGEMENT OF SOMNAMBULISM IN CHILDREN

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ABSTRACT

Sleep is a condition of body and mind which typically recurs for several hours every night, in which nervous system become inactive, eyes closed, the postural muscles relaxed and consciousness practically suspended. Sleep plays a vital role in good health and well being throughout the life. In Ayurveda literature , Nidra is mentioned one among three pillars of life which plays an important role in maintaining health , proficiency and emotional well-being. Sleep disorders are problem with sleeping including trouble in falling or staying asleep, falling asleep at wrong time or place or abnormal behaviour during sleep like talking or walking in sleep. Sleep walking is a sleep disorder belonging to Parosomnia family. Sleepwalker arise from the slow wave sleep stage in a stage of low consciousness and perform activities that are usually performed during a state of full consciousness .These activity can be as benign as sitting up in bed , walking to bathroom or as hazardous as running , violent gestures , grabbing at hallucinated objects or even homicides. According to national sleep foundation , benzodiazepines like Clonazepam reduces the episodes but the recurrence of episodes demands an alternative approach of medicine. There is no direct reference for sleep walking in Ayurveda but the treatment of insomnia can be given to children suffering with somnambulism in order to reduce the episodes of sleep walking and to improve the quality of sleep.

Keywords:Nidra , Swapna ,Trayopastambha , indiyas, mana, Peeyush, morata ,kilata, koorchika , pishtanna, manahasukham, manoanukulavishaya.

Physiology of sleep: Nidra is one among the Trayopstambha , without which maintaining health is impossible. Physical and mental fatigue are the main cause of sleep. Child falls asleep when the mind and sense organs can’t conjugate with their objects due to exhaustion . Acharya charaka has stated that happiness and sorrow, growth and wasting , strength and weakness , virility and impotence , knowledge and ignorance as well as existence and cessation of life depends on nidra. Vitiation of sharirika and manasika doshas leads to sleep disorders , Such diseases are explained in Ayurvedic classics along with their treatment but there is no direct reference of somnambulism in ayurveda. The symptoms shows that it is caused due to inappropriate sleep and child walks and talk during the episodes. In such cases, management of insomnia like vatahara treatment, mental relaxation gives good results.

Causative factors of Somnambulism

Sleep deprivation ,fatigue , stress ,depression , anxiety , irregular sleep schedule can cause the somnambulism . Apart from this GERD ,migraine ,
hyperthyroidism are responsible for somnambulism.3

Samanya hetu of nidra roga described in classics are Psychological causes like fear, anxiety, anger, sorrow, greed, joy, agitation etc. can affect the normal pattern of sleep and cause sleep disorders like somnambulism. dietary consumption of food capable of aggravating vata and pitta, dhatukshaya (wasting of dhatu), upavasa (fasting) vitiate the sharirika and manasika dosha produces nidra roga in children. Apart from this unwholesome regimen like watching television and playing video games close to bedtime can affect the child mental status which affects the normal sleep at night.

Pathogenesis

Mind plays an important role in pathogenesis of sleep. Tamo guna helps in production of sleep. It is associated with kapha dosha. Whenever mind get disturbed due to any thought it increases rajo guna which closely resembles with the vata dosha. Vitiated manasika dosha (increased rajo guna) and sharirika guna (increased vata dosha) diminish the effect of tamo guna which ultimately causes sleep disorders.

Clinical features

- Child walks during sleep.
- Walking and talking may take place at same time and child will not respond to commands during episodes.
- Amnesia following an episode.
- The range of episodes can be as simple as just sitting up in the bed or walking about the room to the episodes where the child run and scream.
- In some sleep walking cases, the child may urinate in an inappropriate place.
- The child may use words that would not be used when awake
- The child may fall and injure themselves.
- Child will be disoriented or confused for a short time after being awakened.
- Episodes of Somnambulism make the child ashamed in family and society and causes adverse mental impact.

Treatment of Somnambulism

Nidra is a state in which all the indriyas and mana loose their conscious activity. While Swapna is the state of mind in which all indriyas loose their conscious activities but the mind is not withdrawn from illusionary experiences. In swapna-awsatha, mind is in active stage which experiences self created events. Symptoms of sleep talking and walking clearly shows that sense organ of child looses their conscious activities but mind is in active state and it is experiencing the incidents which had happened during conscious stage.

Stress, anxiety, phobia, depression increases rajo guna which closely resembles with vata dosha. Whenever mind get disturbed due to any thought, it increases rajo guna which closely resembles with the vata dosha hence increase in rajo guna and vata dosha and diminish the effect of tamo guna, ultimately leading to insomina and problems like sleep talking and walking. Treatment of anidra should be given to improve the quality of sleep. When the equilibrium between sharirika and manasika dosha will be maintained, child will get the sound sleep and the problems like walking and talking in sleep will automatically get cured.

The line of treatment described for anidra in different samhita is almost similar. It
indicates mental relaxation is prime need along with vatahara treatment for management of insomnia. Whole management has been described in the form of specific procedures psychiatric treatment, drug and diet as follow:

**Specific procedures**

- **Abhyanga** – body massage with ksheerabala taila, bala taila, vacha taila
- **Utsadana** – anointing paste of medicines on scalp.
- **Chakshu tarpana** – soothing drops on eye eg. Goghrita
- **Shirolepa** – application of paste on head eg. Chandana, tagara, ushira, jatiphala.
- **Shirobasti** – oil is made to stand over scalp for prescribed time

**Shirodhara** – oil dropping on head
**Karnapurana** – instillation of vataghna oil in ear
**Padabyanga** – foot massage with ksheerabala taila
**Snana and samhanana**

**Psychiatric treatment**
- Pleasant smell, sound, touch
- Psychic pleasure
- Sense of satisfaction
- Thinking about the things which relax mind and fulfilment of desires
- Comfortable bed and home with proper hygiene

**Herbs and sleep**

Table 1: shows the herbs with proven sedative activity in various researches conducted earlier.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Latin name</th>
<th>Chemical constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Acorus calamus Linn [6,7]</td>
<td>Asarone and β-asarone, Acorus oil,</td>
</tr>
<tr>
<td>3.</td>
<td>Alstonia scholaris Linn [8]</td>
<td>Pricrinine, the major alkaloid of the flowers</td>
</tr>
<tr>
<td>5.</td>
<td>Areca catechu Linn [9,11]</td>
<td>Arecoline</td>
</tr>
<tr>
<td>6.</td>
<td>Artabotrys hexapetalus [12]</td>
<td>Essential oil from the laves</td>
</tr>
<tr>
<td>15.</td>
<td>Carvia callosa (Nees) Bremek [16]</td>
<td>Ethanolic extract of the plant</td>
</tr>
<tr>
<td>18.</td>
<td>Celastrus paniculatus Wild [16]</td>
<td>Crude seed oil, brahmoside and brahminoside</td>
</tr>
<tr>
<td>20.</td>
<td>Cissus repens Lamk [19]</td>
<td>Ethanolic extract of the plan</td>
</tr>
</tbody>
</table>
22. **Convolvulus prostrates Forssk** [20] Alcoholic extracts of the whole plant

23. **Clitoria ternatea Linn** [20] Alcoholic extract stem, flowers, leaves & fruit

24. **Cymbopogon citratus Stapf** [21] Essential oil from the leaves

25. **Cyperus rotundus Linn** [21] Alcoholic extract of tubers

26. **Derris indica Lamk** [22] Pongamol

27. **Delphinium denudatum Wall** [22] Aqueous extract of root

28. **Diploknema butyracea Roxb** [22] Ethanolic extract of the seeds

29. **Erithrina indica Lam** [23] Methanolic extract of the leaves


32. **Valeriana Jatamansi Jones** [25] Linarin, 6-methylapigenin, and hesperidin

33. **Withania somnifera Linn** [24] Ethanolic extract of roots

34. **Papaver somniferum Linn** [26] Morphine

35. **Piper nigrum Linn** [27] Ethanolic extract

36. **Myristica fragrans Houtt** [28] Acetone soluble part of n-hexane extract

37. **Rauvolfia serpentina**[29] Reserpine, Rescinnamine

**Diet**
- Gramya-anupa-udaka mamsaras.
- Shali rice with curd or milk.
- Mahisha ksheera.
- Peeyush morata kilata koorchika (milk product)
- Pishtanna (dough preparation)
- Ikshu (sugar cane)
- Draksha (grapes)
- Varahamamsa (meat of boar)
- Guda
- Matsya
- Dadhi
- Masha
- Sita (sugar)
- Yusha (pulses soup)
- Sneha (fat)

**DISCUSSION:** Sleep disorders in children are common but under-reported, their diagnosis require high index of suspicion. Sleep disorders ranges from insomnia to sleep walking in children. Sleep disorders like sleep walking and talking causes considerable anxiety in children. Recurrence of episodes leads to phobia and depression in child. Phobia due to sleep walking and depression indirectly aggravates the pathophysiology by affecting *sharirika* and *mansika doshas*. Changed life style such as watching television close to bedtime, playing video games and mobile up to midnight, continuously using laptop and internet before going to bed are the causes of insomnia. Sleep walking is a complex series of events happen during the stage of low sleep waves when child’s mind is not completely calm down and experiencing the past experiences. Ancient literatures have explained management in the form of specific procedure, psychiatric treatment, drugs and diet for *manasika vikaras*. Following the *ritucharya* and *dinacharya* would be the helpful in preventing the recurrence of episodes after management. Avoiding the excessive stress and treatment of underlying diseases will also be beneficial.

**CONCLUSION:**
- Ahara, Nidra and Bramhacharya are *Trayoupastambha* of life. For ensuring
the growth and development in Balyawastha, following the Yogya-ahara and nidra is essential. It is reported that due to change in lifestyle and increased stress in children disorder related to sleep are seen. Somnambulism has been considered as a psychosomatic disorder by ancient aacharya in which psyche and vata is aggravated. Avoidance of causative factors, relaxation techniques along with other therapies is mainstay of treatment for somnambulism in children. In view of this, manaha-sukham (happiness of mind), manoanukula-vishaya (objects which pleasant to mind) are mentioned in management of sleeplessness which are indicative of psychic management. Ayurveda not only emphasize on herbal formulation but also on specific procedure like Abhangya, Utsadana, Shirodhara while treating sleep disorders. Dietary regimen alleviates the vitiated doshas. Specific procedures and herbal formulation directly act on disease pathology. Proper combination of these three parts of treatment ultimately cures disease. Symptoms like sleep walking and talking are relieved by counselling and following the treatment principle of anidra. Ayurveda has explained safe and effective treatment for sleep disorder, by following these treatment sleep disorder in children can easily rooted up.

REFERENCES
1. Prof. Dr. Subhash ranade, Dr. R.R. Deshpande, textbook of sharira kriya part 2 Edition 2007, chaukhambha Sanskrit pratishthana Delhi, page no 248
2. Prof. Dr. Subhash ranade, Dr. R.R. Deshpande, textbook of sharira kriya part 2 Edition 2007, chaukhambha Sanskrit pratishthana Delhi, page no 249
3. The Cleveland clinic foundation, sleepwalking symptoms, causes and treatment updated on 5 oct 2013
4. Prof. Dr. Subhash ranade, Dr. R.R. Deshpande, textbook of sharira kriya part 2 Edition 2007, chaukhambha Sanskrit pratishthana Delhi, page no 249
5. http://sleepfoundation.org>abnormal-sleep-behaviours>sleepwalking
17. Joan T. Sedative activity of cannabis.

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Source of support: Nil  
Conflict of interest: None Declared