

ROLE OF AYURVEDA IN ADOLESCENT AGE

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ABSTRACT

Adolescence is one of the most rapid phases of human development and transitional phase of growth and development between childhood and adulthood. The adolescent refers to individual between the ages of 10-19 years which make up about 1/5th of Indian population. Adolescent complete their physical, psychological and emotional journey to adulthood that contains both opportunities and dangers. Because these changes happen so fast, this time is often difficult for teenager and parent. The negligence to the health in adolescence may give rise to the many problems. Regarding to health and fertility so the proper care is essential. *Pitta Dosha*, which governs in adolescent stage of life, is associated with transformation, heat and metabolism. During this phase *ayurvedic* oral as well as local treatment modalities have wonderful effects on adolescence health.

Keywords: Adolescent, Development, *Pitta Dosha*, psychological.

INTRODUCTION

Adolescence is a period of life with specific health and developmental needs and rights. It is also a time to develop knowledge and skills, learn to manage emotions and relationships acquire attributes and abilities that will be important for enjoying the adolescent years and assuming adult roles. Adolescence is the age of major physical, intellectual and emotional growth.

Adolescence divided into three phases:

- Early Adolescence (10-13yrs)-
Growth spurt and secondary sex characters
- Middle Adolescence (14-16yrs)
Separate identity from parents, new support with peer groups and opposite sex and experimentation.
- Late Adolescence (17-20yrs)
Established adult physical character, distinct identity and opinions and ideas.

Table 1: Changes during puberty in girls and boys-

Girls		Boys	
Age range	Changes	Age range	Changes
9 to 11 years	Hormone activity starts. Breast budding may start. Ovaries enlarge.	9 to 12 years	Growth of scrotum and testes. Male hormone start to get active.
9 to 14 years	Growth of soft, thin, pubic hair begins. Breast growth is manifest.	11 to 14 years	Growth spurt at its peak. Pubic hair growth begins. Reproductive organ increases in size & length.
9 to 15 years	Breast growth continues. Pubic hair becomes coarser and darker. The girl may get first menstruation in later part of the stage.	11 to 16 years	Under arm hair develops. There is a change in voice. Voice gets deeper. Facial hair grows.
10 to 16 years	Under arm hair begins to grow. Pubic hair continues to grow.	14 to 18 years	Physical growth reaches almost to adult range. Facial hair and chest hair increase.
12 to 19 years	This is the final stage of becoming an adult. Breasts reach adult size. Menstruation cycle gets established ovulation occurs monthly.		

Many controllable chronic diseases of adult life might be detected at this age like Juvenile DM, bronchial asthma, epilepsy etc.
Health problems prevalent in adolescents are described below-

Health Problems:

1. In school/ Scholastic:
 - Underperformance
 - Drop in grades
 - Truancy
 - Bullying
2. Emotional Problems/Psychotic:
 - Anxiety-Excess worry, nervousness, irritability
 - Depression-Sadness
3. Eating problems/ Addiction:
 - Concerns about weight, body shape, self-image especially girls, experiment with diet, induced vomiting, anorexia, nervosa.
4. Behaviour Problems:
 - Substance abuse-alcohol, smoking, gutka, drug cocaine.
 - Sexual offences-Rape, incest prostitution

- STD-Teenage pregnancy, lack of sound knowledge, no contraception or its failure or incorrect use.
- Violence- Anti social behaviour, stoning.

Factors Influencing Adolescent Health and Development:

- Positive family environment, caring and meaningful relationship.
- Positive school performance
- Encouragement for self-expression
- Opportunities for participation and contribution
- Structure and boundaries for behaviour
- Spiritual Beliefs

According to modern science management of these problems by

1) Education for Motor Development:
An adolescent should be provided the education for his motor development. He should be encouraged to play various games and sports. Through these games and sports, his motor development will take place properly.

2) Education of Psychology:

Teachers and parents should have the basic knowledge of psychology. They should be able to understand the mindset of an adolescent because many problems can be solved by an adolescent himself.

3) Vocational Guidance

Teachers should provide vocational guidance to the adolescents. This guidance should be provided keeping in view their intelligence, capabilities, aptitude and interest.

4) To provide suitable environment

Adolescents should be provided suitable environment for growth and development. They should be provided with proper facilities and opportunities for proper development. They should be provided balanced diet, should be taught how to behave.

Ayurvedic view for Adolescent

The exact term for adolescent period is not found in *Ayurvedic* classics. Most of the *Ayurvedic* classics consider 'balyavastha' up to 16 years. According to *Susrutha* 'bala' up to 1 year is called 'ksheerapa', from 1-2 Years is called 'ksheerannada', and from 2-16 Years is called 'annada' but, in *Arogyakalpadruma*, balyavastha is considered up to 12 years of age.

In *Kasyapa Samhitha*, 1-16 YEARS is considered as 'koumara' stage.

According to *Acharya Charaka*, the *Balyaavastha* divided into two parts in which first was *Aparipakwadhatuna awastha* upto 16 years.

Whereas others¹ consider 10-16 years as 'kaishora' stage. Hence, the period of adolescence can be taken as the last stage of 'balyavastha'.

Immature stage includes adolescent period. In this period, maturation might have already started but not fully developed. Hence the adolescent period can be considered as the meeting point of *balya* and *yuvana*. In *Balya* stage, *dhatu*s are in the developing stage. *Charaka* describes this stage as 'vivardhamana'-developing stage. This is a *Kapha* predominant stage. Growth and development in teenage period in both sexes are not mentioned directly in our

classics. The changes happening in this stage can be explained on the basis of development of *dhatu*s. There are many hormonal secretions takes place considered as pitta Mental and social changes happening here can be attributed to the mental faculties of *dhatu*saratha.

Balance of all the five Kaphas

Kapha dosha is predominant in *balyaavastha* which lasts from birth until puberty. The *kapha dosha* directly affects the growth and development in childhood. During this stage of life, the qualities of *Kapha* are inherently increased in the body, which lends children enhanced access to *Kapha*'s strengths but if a disturbance occur in the *Kapha dosha* is the cause of most childhood diseases. And the way to prevent *kapha* imbalances in children is to increase their exposure to specific *kapha* pacifying qualities that help to promote balance.

Avalambaka Kapha

It is located in the chest. By its innate strength and by the power of essence of food, it does lubrication, nourishing etc functions that are attributed to water element. It also influences the functioning of other types of *Kapha*.

Kledak Kapha

Located in the stomach. It moistens the hard food mass and helps indigestion.

Bodhaka Kapha

It is located in the tongue. It helps in taste perception.

Shleshaka Kapha

It is located in the bone joints. It lubricates and strengthens the joint. So, far any physiological process related to stability, compactness, cushioning, etc, *kapha* is responsible.

Tarpaka Kapha

It is located in the head. It nourishes sense organs.

The Nature of Childhood

The correspondence between *kapha* and childhood is very straightforward. Childhood is about growth, building new tissue, accumulating body mass, and rapidly increasing the weight of the physical body as it grows. The body needs a tremendous amount of

kapha in order to pull this off. In other words, the rapid growth and development, the constant generation of new cells and tissues that characterizes childhood, is a process that is inherently governed by *kapha*. There is an elegant intelligence in buffering the body with extra *kapha* during this stage of life. *Kapha* also regulates body fat, which naturally helps to buffer and provide fuel for our bodies during this intensely growth-oriented time period. It is for precisely this reason that a properly nourished child is padded with a layer of “baby fat.” Of course, one’s constitution is a factor; *vata*- and *pitta*-predominant children may carry less baby fat than *kapha*-predominant children, but provided they have access to proper nutrition, all children are naturally a bit chubbier than their balanced, adult self. In fact, if you review a photo history of a healthy individual from infancy to adulthood, you can watch this buffer of fat appear on their bodies in the months after birth and then gradually fade away—appearing to melt off of them as the child matures into adolescence and adulthood.

Children are actually incredibly attuned to the natural correspondence between childhood and the building, nourishing nature of *Kapha*. On a cellular level, children crave sweet, grounding, and anabolic foods that will support the incredible undertaking of growing an adult human body. These qualities can be found in foods rich in the sweet taste such as whole grains, legumes, root vegetables, milk, and many other healthy, nourishing foods, which kids tend to favour. It just so happens that now, unlike any other time in evolutionary history (in the developed world at least), we have access to an abundance of processed foods with a similar qualitative profile—and our children flock to them. This is why kids tend to love bread, mac and cheese, French fries, and other building, *kapha* types of foods. Even sugar, though rather nutritionally empty, can satisfy a child’s physiological craving for the sweet taste, which can quickly become problematic for a child’s health.

Childhood Vulnerabilities

Being the wet, heavy dosha that it is, the extra *kapha* in our systems during childhood also introduces certain predictable vulnerabilities. Common *kapha* imbalances include congestion, coughs, runny noses, frequent colds, and excess mucus etc.

This increased *kapha* influence is complicated by the fact that childhood is also the stage during which we develop immunity. Immunity is established through exposure to various microbes—which means that we have to get sick in order to build up a healthy immune system. So, healthy children can be expected to get sick more often than healthy adults, but they should also be able to weather their colds relatively quickly and easily.

Supporting Balance during the Kapha Stage of Life

Systemic increase in *kapha* that accompanies childhood but, that certainly supports children in keeping predictable *kapha*-imbalances at bay. A few simple considerations can provide deep support to children, and can help to ensure that the natural buffer of extra *kapha* remains just that: a buffer, not an imbalance. This can be accomplished by introducing more lightness, sharpness, heat, dryness, roughness, fluidity, mobility, subtlety, and clarity into our children’s lives.

Diet

Kapha is inherently the most tangible of the three *doshas*, it is well-served by a diet that promotes balance. Light, warm, heating foods that are naturally dry or astringent, fibrous (rough), and clarifying are fabulous for balancing *kapha*. An abundance of fresh fruits, vegetables, legumes, and whole grains, will generally do wonders for balancing *kapha*. It is also extremely helpful to cook with plenty of warming, digestive spices like garlic, ginger, cinnamon, and turmeric. In fact, most spices balance *kapha*, so get creative with them. Sprinkling a bit of *Trikatu* powder on a child’s food like pepper can help to kindle *agni* (the digestive fire) and counter excess *kapha* throughout the system. Warming, clarifying teas such ginger tea with a teaspoon of honey can also be

wonderfully *kapha*-pacifying. Favor the pungent, bitter, and astringent tastes, and particularly when *kapha* is actively aggravated in a child's system, it is best to reduce or avoid *kapha*-provoking foods like wheat, dairy, and sugary sweets.

Lifestyle

Maintaining a strong level of physical activity is one of the most supportive lifestyle choices that we can encourage children to make. Stagnation is perhaps the most likely form of *kapha* imbalance in children, and regular exercise—even in the form of play—can dramatically curb this common *kapha* tendency. Physical activity improves circulation in both the blood and the lymph, balances energy levels, and helps to maintain the proper flow of nutrients and detoxification mechanisms throughout the body's organs and tissues.

Herbs and Formulas

One traditional *Ayurvedic* formula that is fabulous at this stage of life is *Chyavanprash* (a nutrient-rich jam made of *amalaki* fruit and other supportive ingredients). *Chyavanprash* is a strong rejuvenative, which supports the physiology of childhood while bolstering the immune system. Stir *Chyavanprash* into warm milk (or a milk substitute), warm water, or spread it on toast. For children, taking it plain on an empty stomach is often most effective. You can further support *agni* and continue to clear excess *kapha* from the system by offering children supportive herbs in honey. Play with different combinations of things like cinnamon, ginger, turmeric, and *sitopaladi*. Give them a total of ¼ teaspoon of your favorite single- or mixed-herb combo, stirred into a spoonful of raw honey, one to three times per day. This can be particularly beneficial during *kapha* season (winter and early spring), times of transition, and whenever a child is experiencing an acute *kapha* imbalance.

late phase of *Kaumaraawastha* (1-16 years as per Kashyap) can be assumed as commencement of *pitta* predominance because after that *Youvanavastha* started (16-34 years as per *Kashyap*). Therefore five subtypes of *pitta* has been explained here -

Balance all the five Pittas

All the five *pitta* *Alochaka pitta*, *Bhrajaka pitta*, *Sadhaka pitta*, *Pachak Pitta*, *Ranjak pitta* are need special attention in this period of life. Each represents an aspect of *Pitta* and governs certain functions of the body.

Alochaka Pitta

It represents the eyes and is best balanced by consuming a variety of colourful fruits and vegetables.

Bhrajaka Pitta

It supports the skin, which is sensitive during adolescence. Since this is a period of faster transformation, chemicals from skin care products and cosmetics absorb easily into the skin, disturb *Pitta*, and can create rashes and acne. Products made with natural ingredients, on the other hand, nourish the skin without irritating it. The same principle applies to diet. Consuming *Pitta*-aggravating meals, such as spicy and salty fast food, or pizza with tomatoes and cheese, can also irritate the skin, especially on hot sunny days. When *Pitta* is aggravated, the skin becomes less resistant to sun damage. Even mild sunburn can turn into more serious symptoms later.

Sadhaka Pitta

It is present in the heart and governs emotion, contentment, memory and intelligence. This *subdosha* is also highly sensitive in teenagers. A regular routine like going to bed early, and eating regular meals is very stabilizing. Skipping meals and watching violent movies however aggravate *sadhak pitta* leading negative emotions. Sweet juicy fruits such as pears, watermelon and apple are very comforting to *sadhaka pitta*. Raisins, date milk shakes and rice pudding are delicious satisfying and also pacify this *dosha*.

Pachaka Pitta

It governs the stomach and small intestine and is responsible for digestion and assimilation of nutrients. To keep *Pachaka Pitta* in balance, one should eat cooling and nurturing meals made with squashes, mung beans and lassi (sweet yogurt). The following spice mix is also cooling and can be added to every meal.

Ranjaka Pitta

It represents the liver and blood and is especially aggravated by toxins from environmental pollutants and food, which can lead to skin and blood disorders. Foods that support the liver include radish, bottle gourd and gulkand with milk. The spice turmeric also helps the functioning and detoxification of the liver.

Use the Transforming Power of Pitta

Pitta dosha, which governs this stage of life, is associated with transformation, heat and metabolism. To utilize this transforming power and balance *Pitta*, teenagers should eat cooling and nurturing foods. This is the time to start building the foundation for healthy tissues. If teens eat nourishing food, it will quickly turn into healthy cells and tissues. If they live on junk food and fast food that will also transform fast into toxins, giving rise to future health problems like vitiation of pitta give rise to various psychological manifestations like excessive aggression, short tempering as well as physical problems like obesity.

A cooling and nourishing diet includes lots of fresh vegetables, especially squashes; sweet juicy seasonal fruits; soaked nuts and seeds; raisins and dates; milk; lassi and homemade cheese like paneer. Grains, vegetables and fruits will give enough variety to make the diet more attractive. Eating a stewed apple in the morning balances the digestive fire and creates *ojas*, the substance within us that maintains life and promotes bliss. Ghee and sesame oil are excellent uterine tonics, they improve muscle & joint strength and good for hair and skin. Fenugreek is a wonder drug in girls' healthcare. It is a natural hormone balancer. It cures pimples, prevents premature greying of hair.

Four meals a day are recommended for teenagers, with the main meal at noon. They should not overeat even if they are very hungry, because undigested food can create *ama* — toxins that will aggravate *Pitta*. Drinking plenty of water during the day is a good habit to start early. Water cools and balances *Pitta* and detoxifies the body. By water, *ayurveda*

means clear, purified drinking water, not sweetened, flavoured and carbonated soft drinks.

Ayurveda also recommends moderate exercise. Games and sports can be a fun way to get into a healthy habit. In addition to boosting circulation and metabolism, exercise enhances immunity and endurance. Yoga asanas are ideal, because they not only tone the muscles but stimulate the functioning of internal organs. We can use *Amla Berry*, an excellent supplement for muscle growth and vitality, *Ashwagandha*, *shatavari*, *Bramhi* etc. possess anti-stress and adaptogenic properties. *Medhya dravyas* like *Shankhpushpi*, *Vacha* etc promote learning, retention and recall and provide powerful nourishment for the brain.

Teenagers can greatly benefit from practicing Meditation, which increases IQ, enhances learning ability, increases mental clarity and calms the mind and body.

Manas bhava-

In adolescence age various hormonal changes takes place that influence both body and mind. After those sudden changes of temperament of child takes place. Proper care and counselling needed otherwise they may suffer from many psychological problems (*manas rog*) like depression; anxiety etc.

According to *Ayurvedic* philosophy, *Manas roga* are born out of disturbance in *Sattva*, one of the *Trigunas*. *Sattva* is largely responsible for inherent quality of the mind. *Sattva*, if overshadowed by *Rajas* or *Tamas*, losses its predominance and manifestations are evident from depression, anxiety-neurosis, stress, schizophrenia etc.

In *Manas chikitsa Ayurveda* recommends preventive medicine. Correct behaviour, balanced-diet, and non-suppression of natural urges, following daily(*Dincharya*) and seasonal health(*Rutucharya*) regimens are integral part of the *Manas chikitsa*. *Ayurveda* advocates use of nervine-tonics like *Brahmi*, *Ashwagandha*, *Guduchi*, *Yastimadhu* and *Vacha* for preventing onset of *Manas roga*. *Jatamansi* and *Tagara* are drugs of choice in the treatment of anxiety neurosis. *Ashwagandha* and *Shilajit* have

good antidepressant potential as confirmed by clinical studies.

Ayurvedic formulations such as *Ashwagandharistha*, *Shiva Gulika*, *Vachadi churna* and *Panchagavya Ghrita* are famous formulations used in the treatment of *Manas roga*.

CONCLUSION

We can conclude that adolescent age is a crucial phase in which various mental and physical changes takes place in a child. It's a huge task of parents as well as paediatrician to counsel the child in this phase and describe properly about the changes going on in this phase are normal. Otherwise they may suffer from many psychological problems like depression; anxiety etc. causes school abstinence, lack of concentration and confidence. *Ayurveda* can help to reduce these kinds of health problems and changes during adolescent age by various adaptogenic and anti-stress herbs as well as *Panchkarma* therapy like *nasya* and *Shirodhara*.

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