

## A REVIEW ON KALA SHARIR W.S.R. TO RAKTADHARA KALA

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**ABSTRACT**

Oral contraceptive pills have been extensively studied since 1960 and are currently used by more than 70 million women daily. In US-wide research of contraceptive methods, it was found that oral contraceptive use was the most common and that first-graders were more likely to use oral contraceptives (18.9%) than other age groups. Oral contraceptives, also referred to as birth control pills, are used to prevent pregnancy. Any of a group of synthetic steroid hormones that block the release of luteinizing hormone (LH) and follicle-stimulating hormone (FSH) from the anterior lobe of the female pituitary gland are referred to as "oral contraceptives." Usually, when FSH and LH are present, the ovaries release oestrogen. Combination Oestrogen Contraceptives are one class of hormonal contraceptives. Progestogen contraceptive preparations come in pill, skin patch, and vaginal ring forms. They are also available in monophasic, biphasic, and triphasic forms. solely progestin-based contraceptives A formulation that is available as pills, injections, implants, hormone spirals that only contain one hormone, synthetic progestogen, and emergency contraceptive pills, sometimes known as "morning after pills," is referred to as a "minipill. " When used correctly, oral contraceptives can prevent unintended pregnancies in between 92 and 99 percent of cases. Readers will learn about several oral contraceptive methods from this review.

**KEYWORDS:** Oral contraceptive pills, oestrogen, progesterone.

Kala in Ashtanghridaya and Ashtangsangaraha.

Kala is kleda between dhatu and ashaya. He has given more clarification about its genesis that ushma of rasadhata matures the kleda located between rasadhata and its ashaya to form the first kala. Like this it continues till ushma in shukradhatu forms seventh kala. Vagbhat also mention kalas in ashtanghridaya as like sushruta instead of raktadhara kala – asrigdhara kala, sleshmadhara kala – kaphadhara kala.

Kala in Sharangdhar Samhita

Sharangdharas explanation of kala also gives the same meaning and anatomical definition of kala. According to him 'The kleda or moisture or liquid portion present in between dhatu and ashaya is processed by the heat of the body and converts into kala. Sharangdhara explained also seven kala – Mansadhara ashrukdhara, medodhara, yakritpleehadhara, antradhara, agnidhara, retodhara kala.

**Modern view of Kala (Membrane)**

Membrane are formed, during the embryonic period itself, mainly from three kinds of primary tissues – epithelial, connective and adipose.

1. Epithelial tissue – makes for two kinds of secreting membrane viz, mucous and serous; the Former secretes

thick jelly like fluid i.e. mucus and are inside all hallow organs of digestive, respiratory, circulatory, urinary and reproductive system, Serous membranes secretes thin watery fluid and are present enveloping certain organs (heart, lungs, testes etc.)

2. Connective tissue – Membranes formed from this are of different shapes – long, cylindrical, flat etc and go into the formation of fascia, aponeurosis, septa, ligaments, tendons, cartilages etc; some of these are inelastic, some moderately elastic and some greatly elastic. These are found in the skin, walls of organs of digestive, circulatory, urinary, and muscular and haemopoietic systems.

**DISCUSSION AND CONCLUSION**

Kala is important concept described in Ayurved which has to be given more emphasis. Kala are some special membrane in the body which performs some functions and assist to maintain body physiology. The three types of Kala described in Ayurved i.e. Snayu Praticanna, Jarayu Santat and Shleshma Vestita can be correlated with fibrous, serous and mucous membranes in the body. The second kala is Raktadhara kala (supporting membrane of blood) it is present in Mamsa (Muscle tissues) especially in Sira, Pleeha (Spleen) and Yakrut

(Liver). When muscles are cut Rakta flows from the wound just as a milky sap when trees are cut. Acharya sharangadhara mentioned dvitaya Rakta dhara kala but he differs in his opinion he claims that Yakrut (Liver) Pleeha (Spleen) is the 4th kala where Sleshma dhara kala is present. Initially Raktadhara kala is considered as a semi permeable barrier separating lumen from vessel wall, the endothelium is now recognised as a complex endocrine organ responsible for a variety of physiological processes vital for vascular homeostasis. The endothelium has an important role in maintaining vascular homeostasis. Although once considered simply as a semi permeable membrane, endothelial cells transducer a wide range of physiological stimuli, and in response, produce a variety of signalling molecules that exert autocrine and paracrine effects. The endothelium can therefore be considered as an important endocrine organ and is responsible for maintaining vasomotor tone, haemostasis and thrombosis, inflammatory processes, platelet and leucocytes vessel-wall interactions and controlling vascular permeability. The endothelium modulates arterial stiffness which precedes overt atherosclerosis and is an independent predictor of cardiovascular events.

Unsurprisingly, dysfunction of the endothelium may be considered as an early and potentially reversible step in the process of atherogenesis and numerous methods have been developed to assess endothelial status and large artery stiffness. Atherosclerosis a slow disease in which arteries becomes clogged and hardened. It is the underlying cause of most cases of heart attack, stroke and vascular dementia and is found in 80 to 90% of Americans over the age of 30. Fat, cholesterol, calcium and other substances form plaque which builds up in arteries. Hard plaque narrows the passage that blood flows through. That causes arteries to become stiff and inflexible (atherosclerosis is also known as hardening of the arteries). It contributes to the development of cardiovascular disease which is the leading cause of death in people over 45. Soft plaque is more likely to break free from the artery wall and cause a blood clot which can block blood flow to vital organs. Many researchers believe it begins with injury to the innermost layer of the artery, known as the endothelium. The Raktadhara Kala mentioned in Ayurved has great similarity with that of endothelial lining of blood vessels. Any dysfunction will leads to formation of diseases. In contemporary science atherosclerosis is associated with.

3. Adipose tissue (fat) is a storage tissue. It forms membranes or layers – thin or thick in various places. It is present in the subcutaneous tissue, bone marrow, abdominal wall, omentum, forms padding around some organs like kidneys, eyeball etc. With the help of above facts, three kinds of kala. endothelium and other layers of vessels. So kipping in mind the concepts of Kala told by Ayurved the treatment approach to this life threatening disease can be obtained. It could be possible that by means of herbal remedies acting on Raktavaha Srotas or

Rakta dhatu would contribute to reverse the pathology occurred in blood vessels, by normalizing the functions of Raktadhara Kala. In this view a clinical study id planned to assess the role of Raktaprasadana Dravya in the cases of Atherosclerosis. The study includes the anti-lipolytic and anti-inflammatory effects of these drugs in albino rats. The study is ongoing the results are not observed.

Since this is the novel aspect of treatment in Ayurved. Many people have developed Gunachikitsa, Panchabhautika Chikitsa, Tridosha Chikitsa, Nadichikitsa etc. Similarly this can be a new instinct to develop Kalachikitsa as a specialty of Rachana Sharir.

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