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Review Article

A CLINICAL EVALUATION OF PANCHAVALKALA - A REVIEW ARTICLE

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ABSTRACT

Ayurveda is a life science. Even a single drug is enough to cure signs and symptoms. But combinations according to same related *Guna & Karma* is one of the best part used in *Ayurveda* for treating various *Vyaadhis* (disease). This herbal medicine seems to have potential according to their mode of action. That's why *Ayurved acharyas* made some simple combinations known as *Mishraka gana* of herbal plants according to their properties (*Guna & Karma*). *Panchavalkala*, a combination of five astringent drugs named, *Nyagrodha* (*Ficus bengalensis* Linn.), *Udumbara* (*Ficus glomerata* Roxb.), *Ashvatha* (*Ficus religiosa* Linn.), *Parisha* (*Thespesia populanea* Soland ex correa), *Plaksha* (*Ficus lacor* Buch-Ham.), is one of the great combination. It shows properties like antiseptic, anti-inflammatory, immune-modulatory, antioxidant, antibacterial, antimicrobial wound purifying and healing, astringent properties. So the present review article is on clinical evaluation of *Panchavalkala* in various diseases.

Keywords: Panchavalkala, Guna, Karma, Vyadhi, Astringent

INTRODUCTION

Face (*Vaktra*) is one among the most exposed part of the body which reflects the confidence, personality and self esteem of a person, if such an important part of the body gets disturbed by any pathology, then it not only affects the physic of the person but also the psychology of the person. *Mukhadushika* is one of the skin disease described in *Ayurveda* under the *Kshudra roga*. It is primarily seen on face according to *Sushruta*¹ and *Vagbatacharya*^{2,3}. Its having parlance with *Acene Vulgaris* in modern dermatology. It is an exceedingly common problem faced by many patients in adolescence. In contemporary medicine, they provide topical applications and oral antibiotics like clindamycin, tetracycline etc. Modern cosmetology was born-albeit less than half a century ago as compared to *Ayurveda*, which had a *Varnya* concept centuries ago. Markets are flooded with clinically approved topical applications, many of which gave satisfactory results and people lapped them up to rid themselves of scars, patches, spots, rashes, pimples and other skin ailments which were alarmingly on the rise especially in this century. For this, *Panchavalka*, the bark of *Nyagrodha* (*Ficus bengalensis* Linn.), *Udumbara* (*Ficus glomerata* Roxb.), *Ashvatha* (*Ficus religiosa* Linn.), *Parisha* (*Thespesia populanea* Soland ex correa), *Plaksha* (*Ficus lacor*

Buch-Ham.) lepa and *kashaya* having *Vrana ropana* properties which brings changes in the size and pigmentation of *pidakas* in *mukhadushika*. *Mukha dushika* is *kapha vata pradhana* with *rakta* as *dushya* according to *Sushruta acharya* and *meda* as *dushya* according to *vagbhata acharya*. The ingredient of *Panchavalkala* has the properties of *kapha-vata hara* and also *varnya* and *vrana ropana*, *rakta shodhaka* properties hence by administering these drugs in the form of *Kashaya* and *Lepa*, it will clear the ducts and also does the *varna prasadana*. Other reason for *mukhadushika* is infection by bacteria *Propionibacterium acnes*. The drugs in this *Kashaya* and *Lepa* are also having anti inflammatory effect, thus help in treating *mukhadushika*.

The WHO has estimated the overall prevalence of primary infertility in India to be between 3.9 and 16.8%. Moreover, the prevalence of primary infertility has also been shown to vary across the tribes and castes within the same region in India. Female infertility is a challenging issue despite the high fertility rates. Assisted reproductive technology (ART) gives relieve in 41% of the cases, In *Ayurveda*, we compare the human body to the miniature universe. There is a sun-*pitta*, moon-*kapha* and *vayu-vata dosha* in our body, which is the same as compared to the universe. As a sprout comes out as a result of the combination of the season, soil, water and seed,

conception takes place positively if these four factors are combined properly. In the human body, the fertility factor depends on the *Rutu*-ovulation period, the *kshetra*-uterus, the *ambu*-pervading *rasa dhatu* which is formed by the digested food, the *bija*- ovum and the sperm⁴. If there is any impairment in the above four factors, conception will not take place. In *Ayurveda*, 20 types of pathologies which are related to the genital organs have been discussed as *Yoni vyapada*. These are caused by the wrong regimen, menstrual morbidity, genetic defects and as a result of evil actions which were done in the previous life (*Daiva*)⁵. When the reproductive system is afflicted by any of this *yonis rogas*, a woman becomes incapable of retaining or receiving the semen, as a result of which she does not conceive. For the diseases which are caused by *vata dosha*, the patient should give oil massage, fomentation, enema, and such their therapies which all eviate the *vata dosha*. In case of the ailments which are caused by *Pitta*, cooling therapies which are curative of *rakta* and *pitta* are administered. The one of treatment for that is application of the paste of *Panchavalkala* inside the vagina. Affusion, massage and *pichu kriya* (insertion of tampons which are soaked in *ghee* or oil in the genitalia) with the *pitta* pacifying drugs are also effective⁶.

Tundikeri is commonly encountered now-a-day due to the dietary habits of taking spicy food cold beverage and cold climate. Antibiotics are the main stay in treatment of tonsillitis as far as the allopathic system of medicine is concerned. Repeated administration of antibiotics may lead to many side effects in the patients. If there are indications that the patient might have to undergo tonsillectomy and being first barrier to pathogens and site of antibody production, then their removal put a straight forward attack on our respiratory and gastrointestinal tracks and further more surgical procedure has its own complication also. *Kavala* (gargling) with *Panchavalkala Kwatha* provided better therapeutic efficacy. *Acharya Sushruta* has put forward the *chikitsa* (treatment) of this particular disease as per the lines of the disease '*Gala shundika*' followed by local application of drugs having properties of *Lekhana* (scraping), *Shothahara* (anti-inflammatory), *Sandhaniya* (reconstruction), *Ropana* (healing), *Raktastambhana* (blood clotting) and *Vedana Sthapana* (analgesic), *Raktshodhana*, *Ojkara*, *Vishhara*, *Jvarhara* etc. with the *dosha karma* of *Pitta kaphahara* which could be very beneficial in the *Kapharakta* dominating *Tundikeri*. *Acharya Sushruta* stated that *shopha*, *shula*, *toda*, *daha* and *prapaka* and collectively seen in *Tundikeri*. These signs and symptoms are co-related with acute tonsillitis i.e. *shophasthola* – enlarged tonsil, *Daha*– burning sensation, *prapaka* –suppuration. *Yavaksharadi Vati* and *Panchavalkala Kwatha* possess properties and pharmacological activities supportive for preventive and curative treatment of *Tundikeri*. These drugs also possess activities for relief and alleviation of sign and symptoms. They are having *kapha-raktahara doshkarma*⁷. In neonate, the *Bala taila abhyanga* followed by *Panchavalkala kwatha snana* is seemed to have multiple advances.

It can be inferred that the *abhyanga* with *Balataila* and *snana* with *Panchavalkala kwatha* is superior to Coconut oil massage and plain hot water bath so far as other parameters

like systolic and diastolic BP. HR and RR are concerned, changes remains insignificant⁸.

According to *Bhavprakash nighantu*, *Panchavalkala* may be used for the treatment of *Sthaulya* (Obesity) as it acts as *kaphamedo hara*, ability to reduce *kapha* and adipose tissue, *lekhana* (scraping) when use with *gomutra* (cow urine) and *puran madhu* (Honey)⁹.

Buerger's disease is the condition characterized by occlusive disease of small and medium sized arteries (planter, etc.). The condition is strongly associated with smoking. This can be correlated with *Gambhira vatarakta* and treated according to *Ayurvedic Sidhantas* (basic principles). After *Raktamokshana* the affected area was clean (*Prakshalan*) with *Panchavalkala kashaya*. Because *Panchavalkala Kashaya* seems to have property like *Vranaprakshalana*, *Vranaropana* and *Shothahara*¹⁰.

Preventing secondary infections in the surgical wounds with safe and efficacious anti bacterial agents is must in the current scenario to enhance the wound healing process. *Panchavalkala* along with *Triphala* has activities like *vranaprakshalana*, *vranaropana*, *shothahara*, *upadanshahara*, *visarpahara*. As *E. coli*, *S. aureus* and *S. Pyogenes* are the most common organisms for secondary infections in surgical wounds. The standard drug streptomycin has its own side effects and limitations. Hence the *Panchavalkaladi* ointment is herbal based and effective anti microbial and enhances wound healing¹¹.

Qualitative tests revealed absence of steroid in raw *Panchavalkala* samples and finished gel, while it was found present in *Panchavalkala Kwatha* were selected for the preparation of herbal wound healing Gel.

Saponin found present in *Nyagrodha*, *Udumbara* and *Plaksha* and alkaloid found present in *Nyagrodha*, *Udumbara*, *Ashwattha Parisha* and *Plaksha*. Whereas, qualitative analysis of in process and final product revealed the presence of tannins, and phenols in all samples and alkaloid in *Kumari Swarasa*, saponin in *Panchavalkala Kwatha*, *Kumari Swarasa* and Gel. Steroids in *Panchavalkala Kwatha* and *Kumari Swarasa*. While flavonoid found absent in all samples¹².

Shwetapradara is a condition characterized with white vaginal discharge not associated with pain, burning sensation and discomfort, thus it seems to be description of leucorrhoea. Evidence based *Ayurvedic* formulations found to be effective in leucorrhoea caused due to various conditions like Cervical Erosions, Vaginitis, Candidiasis and various gynaecological disorders. *Panchavalkala* ointment is found to be effective against *Trichomonas vaginalis* & *E. faecalis* in vulvo vaginitis during pregnancy. Another study reveal that *Panchavalkala kwatha* is *kapha shamaka*, *stambhaka* and having the properties like astringent, antiseptic (*kashaya rasa*) and wound healing (*vrana ropana*). Because of these properties it helps in increasing local cell immunity and prevents recurrence of symptoms in patients¹³.

Panchavalkala choorna in *lepa* form was assessed in controlling four signs and symptoms viz, *Ruja*, *Srava*, *Raga* and *Shopha*, presented as local reaction to *keeta visha* (insect bites and stings) exclusively on clinical subjects. The analysis of observations and results of this study can be concluded that the drug is highly significant (P<0.001) in reducing the four

cardinal symptoms of *Keeta visha*. Hence its local application can be recommended in cases of *Keeta visha*¹⁴.

Eczema is a form of dermatitis where inflammation of epidermis occurs. The exact cause of eczema is not known. Although it is activated by the immune system and is related to allergic reactions, it is not the same as other allergic reactions. In *Ayurveda*, the disease is described by the name “*Vicharchika*.” The patient had features of cellulites with wound. Care was taken by daily dressing with medicated decoction wash (*Panchavalkala Kwath Prakshalana*). *Panchavalkala Kwath Prakshalana* has cleansing as well as healing property. The gel hand wash of *Panchavalkala* has anti bacterial activity particularly against *B. pumillus* and *S. aureus* at minimum concentration of 400 mcg/ml. The microbial organism was found to be resistant to liquid sample of *Panchavalkala kwatha*. Probable cause for this inactivity may be the lower concentration of *Panchavalkala* in the end product. The gel showed significant results at concentrations starting from 400 mcg/ml against two bacterial species. The significance was found to be more in comparison to the standard reference. More concentrations may be needed to get a broad spectrum activity of the trial drug¹⁵.

RESULTS AND DISCUSSION

Studies indicate that the Pharmacological action of *Panchavalkala* (Bark) is found to have Antiinflammatory, Analgesic and Antimicrobial properties. Early researches explain that tannins present in *Nyagrodha* and *Udumbara* are antioxidants and blood purifiers with anti-inflammatory actions. They hence might have helped to decrease the swelling. The phytosterols and flavonoids are anti-inflammatory and analgesics reducing the pain. Tannins also proved to have antimicrobial property which might have reduced the discharge. Hence these constituents in the *Panchavalkala* might have helped in regression of signs and symptoms.

CONCLUSION

The results of research articles are very encouraging & indicate that the *Panchavalkala* should be studied more extensively to confirm these results & reveal other potential therapeutic effects. According to *Guna Karma*, *Nyagrodha* (*Ficus bengalensis* Linn.) have properties of *Varnya*, *Visarpa-daahagna*, *Yonidoshhruta*, *Vyanga naashanama*, *Raktapittavinashana*. *Udumbar* (*Ficus glomerata* Roxb.) have properties of *Vranashodhana*, *Ropana*, *Raktapittaghna*. *Ashvathha* (*Ficus religiosa* Linn.) possess properties of *Varnya*, *Yonivishodhana*, *Raktadaaha shaman*. *Plaksha* (*ficus lacor* Buch-ham.) & *Parish* (*Thespesia populnea* Soland. Ex *Correa*) shows properties of *Vranayonigadaapaha*, *Raktapittahruta*, *Raktadoshahara*, *Murcha-pralaap-bhramanaashana*. In classical terms, it can be explained that *Katu*, *Tikta*, *Kashaya Rasa*, *Laghu*, *Ruksha*, *Teekshna Guna*, *Ushna Veerya*, *Katu Vipaka* and *Kaphapittaghna* properties of drugs are responsible to break the *Samprapti* of diseases. As compared with modern view, *Panchavalkala kwath* phytochemically dominant in phenolic group components like tannins, flavonoids which are mainly responsible for its excellent activities antiseptic, anti-inflammatory, immune-

modulatory, antioxidant, antibacterial, antimicrobial and wound purifying as well as healing, astringent properties.

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