



A REVIEW ON *DESADUN KALKA* IN SRI LANKAN TRADITIONAL MEDICINE

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ABSTRACT

Ayurveda, is the one of the world's oldest healing systems and its roots engaged with the Traditional Medical system in Sri Lanka. It has been called as *Deshiya Chikitsa*. Therefore, a great combination of treatment practices is present to treat patients through combined drug preparations of both systems. *Ayurveda* and Traditional Medicine have survived for centuries for effectiveness and time-tested potent medical practices. According to Sri Lankan Traditional Medicine, *Desadun Kalka* is the commonest internal application for children specially, as an immunity enhancer and many diseases such as *Balaka Jwara* (Fever in children), *Balaka Vibandha* (Constipation in children), *Ladaru Ratha Gaya* (Skin dermatitis in children) and *Raktaja* and *Pittaja* diseases. It contains *Ojo Wardhka* (Immunity enhancing) *Pitta Shamaka* (Pacify Pitta Dosha) and *Raktha Shodhaka* (Purify blood) actions due to *Rasa, Guna, Veerya and Vipaka* in these ingredients. As per modern medicine, pharmacological actions such as anti-inflammatory, anti-microbial, cardio protective and anti-oxidant actions present in these ingredients.

Keywords -*Desadun Kalka, Ojo Wardhka, Vatikaprakaranaya, Sri Lankan Traditional Medicine*

INTRODUCTION

Desadun Kalka is a well-known and commonly used drug preparation for children in Sri Lankan Traditional Medicine. The synonyms are *Rathakalka* and *Ladaru Kalka*. Also it is a main component in *Vatikaprakaranaya* (Main authentic text book in Sri Lankan Traditional Medicine) which is written by Illeperuma Arachchige don Sadiris da Alwis Illeperuma in 1879.^[1] *Desadun Kalka* can be used for immunity enhancer and many diseases such as *Balaka Jwara* (Fever in children), *Balaka Vibandha* (Constipation in Children), *Ladaru Ratha Gaya* (Skin dermatitis in children) and any *Raktaja*

and *Pittaja* diseases.^[1] In the modern society, there is an increasing demand for the herbal medicines due to effectiveness and less side effects. This is a frequently using and more effective drug for children in both Traditional and *Ayurveda* Medicine.

LITERATURE REVIEW

In *Ayurveda* there are five basic primary preparations known as *Panchavida Kashaya Kalpana*. *Kalka* (paste) is one of that preparations. *Desadun Kalka* is the herbal paste in semisolid form which is used for internal application. The method of preparation as follows, take the power of above ingredients and mix it with lemon juice then keep it in an earthen pot. Then

grind with lemon juice till it becomes soft paste. Dosage of *Kalka* is *Rakthika* 1-2 (125 mg – 250 mg). The life span is more than 24 hours. *Desadun Kalka* can be given with different *Anupana* like breast milk, honey coriander boiled water. [2]

According to the *Vatikaprakaranaya*, herbal ingredients are ,

- Kollu seeds – *Macrotylomaun niflorum*

- Wadakaha roots – *Acorus calamus*
- Welmie roots – *Glycyrrhiza gabra*
- Rathhadun wood – *Pterocarpus santalinus*
- Suduhadun wood - *Santalum album*
- Dehi fruit - *Citrus limon*
- Sahidalunu-Rocksalt

Table 01 - Herbal Ingredients used to prepare *DesadunKalka* are as follows [3][4]

Vernacular name	Sanskrit name	Botanical name	Botanical description	Used parts
Kollu	<i>Kulattha</i>	<i>Macrotylomaun iflorum</i>	Weak climbing vines, leaves trifoliate, of two sizes, leaflets ovate, flowers yellow and fruit 2-4 seeded. Seeds ovoid, dark brown.	Seeds
Wadakaha	<i>Vacha</i>	<i>Acorus calamus</i>	An aromatic, marshy herb with a stout creeping, branching and fruits present they are berry-like, containing few seeds.	Roots
Welmie	<i>Maduka</i>	<i>Glycyrrhiza gabra</i>	A plant of the family <i>Fabaceae</i> , from the root of which a sweet taste can be extracted and herbaceous perennial that has been used as a flavoring agent in foods and medicinal remedies.	Roots
Rathhadun	<i>Rakta Chandana</i>	<i>Pterocarpus santalinus</i>	Is a small tree, growing to 8 m tall with a trunk 55 cm diameter. The leaves are alternate, 3–9 cm long, trifoliate with three leaflets.	Wood
Sduhadun	<i>Shveta Chandana</i>	<i>Santalum album</i>	Small tree, 6-10m high, smooth bark & leaves are simple, oval shape or lanciolate bisexual flowers, small, purple red color.	Wood
Dehi	<i>Jambira</i>	<i>Citrus limon</i>	Is a species of small tree in the flowering plant family <i>Rutaceae</i> , thorny tree that grows well a yellow or pale yellow prolate fruit with 5 to 10 seeds.	Fruit

Table 02- Pharmacological properties of dravya used in Desadunkalka^{[5][6][7]}

<i>Dravya</i>	<i>Rasa</i>	<i>Guna</i>	<i>Virya</i>	<i>Vipaka</i>
Kollu	<i>Kashaya</i>	<i>Laghu</i> <i>Teekshna, Ruksha</i>	<i>Ushna</i>	<i>Amla</i>
Wadakaha	<i>Katu, Thiktha</i>	<i>Laghu, Teekshna</i>	<i>Ushna</i>	<i>Katu</i>
Welmie	<i>Madura</i>	<i>Guru, Snighdha</i>	<i>Sheetha</i>	<i>Madura</i>
Rathhadun	<i>Thiktha, Madura</i>	<i>Guru, Ruksha</i>	<i>Sheetha</i>	<i>Katu</i>
Suduhadun	<i>Madura</i> <i>Thiktha</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Sheetha</i>	<i>Katu</i>
Dehi	<i>Amla</i>	<i>Laghu, Theekshna</i>	<i>Ushna</i>	<i>Amla</i>
Sahidalunu	<i>Lavana</i>	<i>Laghu</i> <i>Teekshna, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>

Table 03- Chemical constitutes & pharmacological properties of dravya used in DesadunKalka^{[8][9][10]}

<i>Dravya</i>	Chemical constitutes	Pharmacological properties
Kollu	Crude protein Pentosan Urease	Antioxidant Cardio protective Regulate the blood sugar level
Wadakaha	Acolamone Acorenone Cadalone	Improve intelligence Expectorant Anti-inflammatory
Walmie	Glycyrrhizin, Isoliquiritin Liguiritin	Anti-inflammatory, Diuretic Expectorant
Rathhadun	Alkaloids Phenols Saponins	Anti-oxidative, Anti-diabetic, Anti-microbial, Anti-inflammatory
Suduhadun	Santalols Betulic acid	Cardio protective Blood Purifier, Antiseptic Diuretic
Dehi	Citric acid Vitamins	Appertizer Blood purifier, Anti-septic
Sahindalunu	NaCl Na ₂ S	Dissolution, Absorption

DISCUSSION

The qualitative analysis of 7 types of ingredients, most prominent *Rasa* in this formula is *Madura, Thiktha* and *Kashaya*, which are pacify *Pitta Dosha, Vata Dosha* and it can improve *Ojas(Immunity)* in the body also *Laghu, Ruksha* and *Thikshna Guna* which are circulating through *Srotas* (small channels) and eliminate vitiated

Doshas from the body. The ingredients possess *Ushna* and *Sheeta Veerya* with pacifying *Tridhosha* and the *Vipaka* is noted with the *Katu*. Due to these properties *Desadun Kalka* is commonly indicated for *Raktaja* diseases, *Pittaja* diseases and as a *Ojas Wardaka* medicine for children.

CONCLUSION: *Desadun Kalka* is one of common formula that used for many disease conditions mainly of *Rakta and Pitta* imbalances for children. According to the compile review of *Desadun Kaka* has proven to be a immunity enhancing and *Rakta and Pitta* pacifying medicine, due to this pharmacodynamic properties of *Madura, Thiktha* and *Kashaya Rasa, Laghu, Ruksha, Thikshna Guna* accompanied by *Ushna and Sheeta Veerya* and *Katu Vipaka*. *Desadun Kalka* can be used for many diseases such as *Balaka Jwara* (Fever in Children), *Balaka Vibandha* (constipation) because it contains rock salt in high quantity and *Ladaru Ratha Gaya* (Skin Dermatitis) and any *Raktaja* and *Pittaja* diseases due to *Rakta Shodaka* (Purify blood) and *Pitta Shamaka* (Pacify *Pitta Dosha*) action. The use of this medicine is a very common among Sri Lankan Traditional practitioners and Ayurveda practitioners and it was included in daily practice. This medicine was used as internal medicine for children, because it is much safer, affordable and more accessible for children.

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