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# A Single Case Study on the Effect of Some Ayurvedic Medicines over *Switra* (vitiligo)

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Abstract: Skin is the major sense organ as it covers the whole body & is the first organ to interact with environmental stimuli. According to Ayurveda skin is one of the most essential sense organs which is maintained by the action of bhrajaka pitta, which provides color, complexion & general health to the skin. Switra is one of the disease conditions of the skin characterized by whitish discoloration of skin which is similar to the sense vitiligo of modern medicine where milky-white sharply demarcated macules are usually found (1). The Worldwide incidence of vitiligo is observed in 0.5-1% of world population (2). Whereas the solution of said problem is mostly unsafe & unsatisfactory in western science. There are so many herbs & minerals have been contributed by the ancestors of ayurveda as 'vranaprasada' (enhancer of color &/or complexion) & kusthanasa (remedy against obstinate skin diseases). In present study a switra (vitiligo) patient of 29 years of age has been treated with ayurvedic therapy at the OPD & IPD of I. P. G. A. E& R (SVSP HOSPITAL), Kolkata. After 6 month of treatment (sodhana followed by samana therapy) very satisfactory curative effect has been found through marked increasing of pigments over affected part. The main aims & objectives of the study are to provide a safe & efficacious ayurvedic management to the switra (vitiligo) patient and to encourage the ayurvedic clinician towards proper management of the disease switra (vitiligo).

Keywords: switra in ayurveda, switra & vitiligo

#### 1. Introduction

The Ayurveda is an ancient science deal with the prevention and cure of disease by introducing several herbal-mineralorganic or herbo-mineral compounds. Like other disorders skin disease has also been discussed by our classic vividly in their respective text like 'Charaka Samhita' (200 BC), 'Susruta samhita' (500 BC), 'Astanga hridaya' (400 AD) & 'Madhava nidana' (900 AD) etc. In Ayurveda all skin disease comes under kustha (the obstinate skin diseases including leprosy). Acharya charaka dealt with switra after deeply explaining the kustha chikitsa. Acharya Susruta called the disease as kilasa instead of switra (3). The etiology of switra, kilasa & varuna is similar to that of kustha like indulgence in incompatible food & drinks, suppression of the emesis or other natural evacuatory reflexes, day sleep, drinking cold water immediately after being exposed to the sun (4) etc. However, switra has no discharge, their origin is considered to be from the three dosas (vata-pitta-kapha) & their location is in the three dhatus (rakta-mamsa-meda). Lesions due to vata are dry & reddish; those due to pitta are copper coloured like the petals of a lotus, are associated with a burning sensation & loss of hairs; whereas those due to kapha are white, thick & indurated with an itching sensation (5). The exact pathogenesis of vitiligo is still to be elucidated. A number of hypotheses have been advanced to explain the pathogenesis, none of which is entirely satisfactory. One popular theory is that melanocytes are the target of a cell mediated autoimmune attack. In particular, the autoimmune mechanisms (cellular and/or humoral) that result in destruction of melanocytes is now clearly established. In modern science, mainstream treatment of vitiligo is PUVA (psoralen + ultraviolet A exposure) therapy and potent topical corticosteroids can sometimes be helpful (6). In Ayurveda there are several drugs have been recommended by the classics as *samana ausadhis* (oral medicines) for the managements of *switra* (vitiligo). Among those drugs *switrari rasa*, *gandhaka rasayana*, *navayasa lauha* & *mahamanjisthadi kasayam* are very much common in the treatment of *kustha* as a whole & *switra* (vitiligo) in special. So, initially those drugs have been administered & latter others oral drugs like *arogyavardhani vati*, *haridra khanda* & *khadiraristha* have been used orally. Beside this *samana* therapy a reputed medicated oil named *bakuci taila* has been used locally during the course of therapy & before starting the *samana* therapy, *sodhana* therapy has been performed in conventional manner like *snehana* (external & internal oleation), *swedana* (*guru pravarana* with 10 blankets for half and hours) & the *vireachana* (purgation) *karma* followed by *samsarjana karma* has been administered.

#### 2. Material & Method

Present study was carried out in I. P. G. A. E & R, at S. V. S. P

**Case Report:** A 29 years young female patient presented with whitish discolouration on back of the neck since last 8 months.

**History of present illness:** patient was apparently healthy before 8 months, gradually she developed with small white patches over back of the neck & increasing day by day in size.

**Psychological history:** patient had more stress 4 month back due to her marriage date was fixed. size of white patches increased day by day from last 4 month.

**Personal history:** dietary habits (*Ahara*) revealed the use of mixed dietary habits. Taking home cooked food as well as

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junk food. Behavioural habits (vihara) – sedentary lifestyle; Bowel habits were regular with hard stool sometimes: sleep was normal: micturition was normal.

**Mensural history:** Normal; 4-5 days with an interval of 28 days & the flow within normal limit.

Family history: no such

**General examination:** build-moderate; tongue-clear; pulse rate-76/min; BP-110/80mm of hg. Respiratory rate – 19/min; temp – normal.

#### Physical examination

Dasavida pariksha: prakriti-vata kapha; vikriti-kaphavata; satma-madhyama; satva-madhyama; sara-mdhyama; samhanana-madhyam; ahara sakti-madhyama; vyama sakti-avara; pramana-5ft 2inch; vaya-yavana.

Systemic: CNS – Normal, C. V. S: S1, S2 clear, RS-Normal

#### Local examination

- 1) Site of lesion-back of neck
- 2) **Distribution** (*vyapti*) Asymmetrical
- 3) Character of lesion-size: 5-8cm, colour-chalky white
- 4) **Itching** mild

#### 5) **Inflammation** – absent

6) **Discharge** – absent

**Diagnosis:** based on the clinical features and examination this case is diagnosed as *switra* (vitiligo).

**VASI** (Vitiligo area severity index) **SCORE:** Its name is an adoption from PASI score in psoriasis. The percentage of vitiligo involvement is calculated in terms of hand units. One hand unit is approximately equivalent of 1% of the total body surface area. The degree of pigmentation is estimated to the nearest of one of the following percentages.

| 100% | Complete depigmentation & no pigment is present |  |  |
|------|---|--|--|
| 90%  | Specks of pigment present                       |  |  |
| 75%  | Depigmentation area exceeds the pigmented area  |  |  |
| 50%  | Pigmented & depigmented areas are equal         |  |  |
| 25%  | Pigmented area exceeds depigmented area         |  |  |
| 10%  | Only specks of depigmentation present           |  |  |

#### VASI Score (Before Treatment)

| Location         | Body surface area    | Pigment  | Total hand |
|------------------|----------------------|----------|------------|
| Location         | involved (hand unit) | loss (%) | unit (%)   |
| Back of the neck | 1                    | 0.75     | 0.75       |

#### Recipe:

## Treatment protocol

#### Sodhana

- Deepana & pachana x 3days
- 2 Snehapana (internal oleation) x 4days
- Sneha abyanga(external oleation) swedaba (guru pravarana) x 3days
- 4 Virechana (nimba-amritadi-eranda taila) on 11<sup>th</sup> day
- Samsarjana karma x 4days

#### Samana

- 1. Switrari rasa
- 2. Gandhaka rasayana
- 3. Mahamanjisthadi kwath &
- Navayasa lauha
- Arogyavardhani vati
- Khadiraristha
- 7. Haridra khanda

| Duration | 15 days | 2nd ½ month     | Another 3 month |  |
|----------|---------|-----------------|-----------------|--|
| Therapy  | Sodhana | 1st line samana | 2nd line samana |  |

**Table 1:** Sodhana karma (deepana-pachana)

| day | Medication                                       | Diet                        |
|-----|--|-----------------------------|
| 1st | Panchakola churna (3gm) noon & night before food | Easily digestible veg diet. |
| 2nd | Panchakola churna (3gm) noon & night before food | Do                          |
| 3rd | Panchakola churna (3gm) noon & night before food | Do                          |

**Table 2:** (Sneha pana-abhyanga, swedana & virechana)

| day    | Medication  |       | Diet              |
|--------|---|-------|-------------------|
| 4th    | Mahatikta ghrita  | 50ml  | Easily digestible |
|        |   |       | veg diet.         |
| 5th    | Mahatikta ghrita  | 80ml  | Do                |
| 6th    | Mahatikta ghrita 1  | 20 ml | Do                |
| 7th    | Mahatikta ghrita  | !50ml | Do                |
| 8-10th | Abhynga with maha marichadi taila<br>& swedana (guru pravarana with 10<br>blankets) |       | Do                |

| 11th | Abhynga with maha marichadi taila<br>followed by virechana karma by<br>Nimba amritadi eranda taila 50ml at<br>8am (virechana) | Mudgayusa at<br>lunch and liquied<br>kichadi at night. |
|------|---|--|
| 12th | samsarjana karma  | Semi solid <i>khichdi</i> at lunch & dinner.           |
| 13th | samsarjana karma  | Easily digestible veg diet.                            |
| 14th | samsarjana karma  | Normal diet (veg<br>or non veg)                        |

Patient had 16 *vegas* during *virechana karma* (*kaphanta*). It was *madhyama suddhi* and *madhyama bala* patient.

**Table 3:** Samanaousadhi after Samsarjana karma (1st line samana therapy for 2nd ½ month)

| samana therapy for the 72 month) |   |  |  |
|----------------------------------|---|--|--|
| Medicine                         | Dose & duration (2nd ½ month)                             |  |  |
| 1. switrari rasa (125mg)         | 1tab twice daily after food                               |  |  |
| 2. gandhaka rasayana (250mg)     | 1tab twice daily after food                               |  |  |
| 3. maha manjisthadi kwath        | 20 ml with equal quantity of water once daily before food |  |  |
| 4. Navayasa lauha (500mg)        | Once daily after food                                     |  |  |

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**Table 4:** 2<sup>nd</sup> line of *samana* therapy (for another 3 month)

| Table 4. 2 The of samana therapy (for another 3 month |                             |  |  |
|---|-----------------------------|--|--|
| Medicine  | Dose & duration (3 month)   |  |  |
| 1. Arogyabardhani vati (250mg)                        | 1tab twice daily after food |  |  |
| 2. khadiraristha                                      | 15ml with equal quantity of |  |  |
|   | water once daily after food |  |  |
| 3. haridra khanda (3gm)                               | 1tsf twice daily after food |  |  |

**External application:** *Bakuchi taila* applied over the spot for a period of 10 to 30 minutes in the morning & after that sunlight exposure for 5-10minutes.

#### Drugs action over switra (vitiligo)

**Panchokola choorna** (7) – blanching *vata* & *kapha*. It acts as a *deepana-pachana*.

**Mahatikta ghrita** (8) – as this *ghrita* is *tikta pradhana*, *kaphahara* & indicated in *kushthavikara*. *Ghrita* lubricates and softens the *dosha*, improve digestion, regulate bowel, improve strength and complexion.

**Mahamarichadi taila** (9) – antifungal, antiseptic, antioxidant. it's used in *kustha rogadikara*.

*Nimba-amritadi eranda taial* (10) – used as *virechana* purpose in panchakarma therapy specially in skin disease.

Switrari rasa (11)-

Gandhaka rasayana (12): main ingredients are gandhaka (sulphur) which has several potential uses for skin disease.

these drugs itself *raktosodhaka*, *kushtaghna*, immunomodulator & *twachya*.

**Mahamanjisthadi kwath** (13) – it's used in the treatment of skin diseases. Also acts as a blood purifier, antioxidant, having healing properties etc.

*Navayasa lauha* (14) – intake of this along with honey & ghee cures anaemia, jaundice & *kustha* (obstinate skin diseases including leprosy).

Arogyavardhani vati (15)-

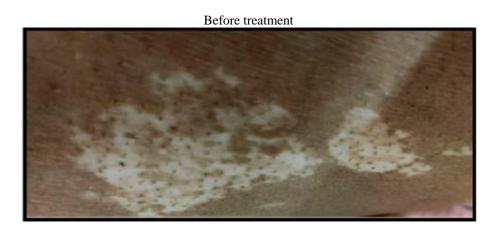
*Khadirararistha* (16)-it is used in *maha kustha*, *hridroga*, *pandu*, *plihodara* & espically all kinds of *kustha*.

*Haridrakhanda* (17)-it is very essential medicine for *sitapitta*.

#### 3. Result & Observation

| Assessment tools | Before<br>treatment |       | After sodhana,<br>samana therapy<br>(1st line) for 2½<br>month | Samana<br>therapy (2nd<br>line) for<br>another 2½<br>month |
|------------------|---------------------|-------|--|--|
| VASI Score       | 0.75%               | 0.45% | 0.25%  | 0.15%  |
| Itching          | +++                 | +     |  |  |

#### 4. Pictures



After 3month treatment



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After 6month treatment



#### 5. Discussion

As switra is a great noxious topical problem which make patient psychologically frustrated and there are no such safe and effective measures found in modern medicine till date. So, this study is an effort to established some Ayurvedic remedies as switranasaka or anti-vitiligo therapy. Through literature survey it has been revealed that vata-pitta-kapha (tridosa) get aggravated & affects rakta-mamsa-meda (dhatu). So, hypothetically rakta-mamsa-meda sodhaka as well as tridosanasaka medicines & therapy are needed to cure the switra. Switrari rasa which is composed of kajjali along with bakuchi etc. are potent vata-pitta samaka as well as kaphanasaka. Navayasa lauha is a drug act on yakrit vikara & potent remedy against raktaja & pittaja vikara. Mahamanjisthadi kwath contain the properties like - raktasodhaka, kandunasaka, kusthanasaka, pachaka, srotosodhaka. All others medicines like - gandhaka arogyavardhani vati, haridrakhanda rasayana, khadiraristha are mainly pittasamaka, kaphasamaka, vatasamaka, raktasodhaka in action. In present study sodhana (bio purificatory) therapy has been performed through snehana (external/internal oleation) followed by swedana (fomentation) & latter virechana has been done. Through this sodhana therapy all short of obstruction in microchannels which are liable for producing less pigment to the area (hypopigmentation) could be clear. The stimulation to the melanocytes could be happened through the snehana-swedana externally & internally with the raktasodhaka like – mahamanjisthadi kwath, khadiraristha & navayasa lauha. Overall rejuvenation of topical system could be happened with the adding of gandhaka rasayana, haridrakhanda etc. snehana pacifies vata, swedana pacifies kapha & virechana pacifies pitta. So, by sodhana therapy tridosa (vata-pitta-kapha) get may come into equilibrium state & through local application of bakuchi taila the microcirculation of the affected area gets well established.

After observation of improvement in pigmentation the apparent mode of action of used sodhana therapy & samana ausadhis have broken the pathogenic pathway of genesis of swita as a result no other whitish spot has been appear till the course of therapy. No adverse effect has been observed as well.

#### Conclusion

From above discussion it could be conclude that definitely ayurveda has a safe & curative effect over switra (vitiligo) & the claim of our ancestor regarding kushtanasaka dravya are very much relevant & potent.

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