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Case Study
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# SUCCESSFUL AYURVEDIC MANAGEMENT OF SEVERE AUTOSOMAL RECESSIVE CONGENITAL ICHTHYOSIS - A CASE STUDY

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#### ABSTRACT

Ichthyosis is a condition that causes extensive and persistent thick, dry, fish type of scales on skin of the body. Sex linked Ichthyosis (X linked) is a form of Ichthyosis, an Autosomal recessive disorder and the condition is a lifelong morbidity, having no cure. **Case Study**: One 10 day old male baby developed this disease with symptoms of fish scales covering almost whole body within a span of few days. The DNA test diagnosis was 'Autosomal recessive Congenital Ichthyosis'. The case was tried to manage at primary to tertiary level for 3 years, but there was no relief. The case finally approached to Ayurved system of Indian Medicine and within a period of 2 months there was >90% relief. The child is almost symptom free for last one and half years. Ayurved has proved its place in cases where absolutely there is no cure.

KEYWORDS: Autosomal recessive Congenital Ichthyosis, Psoriatic Ichthyosis, Ek-Kushtha, Kshudra kushstha

Ichthyosis is a skin condition that causes extensive and persistent thick, dry, fish scale skin over the body. There are 20 various forms of Ichthyosis. Some forms are inherited at birth, while some forms manifest in adult life. However there are 2 most common types of inherited Ichthyosis namely, Ichthyosis vulgaris and Sex linked (X linked) Ichthyosis. Ichthyosis vulgaris which is an Autosomal dominant disorder. Its prevalence is 1: 250-1000 people. Skin may appear normal at birth but gradually becomes dry, rough and scaly before one year of age. Face and bends of elbows and knees are usually not affected. [1,2]

Autosomal recessive Sex linked (X linked) Congenital Ichthyosis is an Autosomal recessive disorder affecting 1: 300000-500000 people. It affects only males while females are carriers. Limbs, neck, trunk and buttocks are most commonly affected but if there are mutated genes, whole body is affected. It is documented that there is risk of Testicular malignancy in these persons in later adult life. There may be low sperm count leading to sterility in males<sup>[3]</sup> The disease is called to be incurable. [4] Kashyap in Ayurved, has also opined it as incurable disease. [5]

#### **CASE STUDY**

This male child, son of an army soldier, was born on 12.12.2017 by LSCS. On 10<sup>th</sup> day of life he developed rash over the body, skin became dry followed by appearance of fish type of scales all over body. The severity was gradually increased. He was treated by skin

specialist for 3 months but there was no relief. Finally he was referred to one famous tertiary level hospital of Navy in Mumbai. His skin biopsy was made and it was diagnosed as a case of Psoriatic form of Ichthyosis. He was advised to use one skin lotion but its effect was momentary. Meanwhile, his father was transferred to Pune and one skin specialist from Pune recommended for DNA test of the case. The diagnosis was Autosomal recessive congenital Ichthyosis 6, Gene-NIPAL4. They tried all possible modern therapy including Steroid therapy, Vitamin therapy but there was no relief. His father was finally informed by one skin specialist from one tertiary level Medical College Hospital in Pune that the case was incurable and it will remain lifelong forever. His father was in a state of agony when he was referred to the author by one of her patients. He approached to the author in last week of Jan 2021. His clinical condition was miserable. His skin was dry and skin over whole body was affected by fish scales. There was swelling over his face, able to open eyes partially. He was irritated and constantly crying. (Fig No.1).

He was treated on the sound principles of Ayurved i.e. *Deepan-Pachan, Anuloman and Apunarbhav chikitsa*. There was tremendous improvement in the condition of the case within 2 months of Ayurvedic treatment. The process of formation of fish scales stopped. Hairs started growing on eye brows and scalp. His general condition also improved. Child started playing with his mates. The

child is almost symptom free for last more than 18 months. Ayurved has bestowed him quality of life.

Treatment:-Saddovaman was executed in the child, which followed 2 times vomiting. The child was given Sitopaladi choorna along with Avipattikar choorna (total 750 mg) three times a day for Pachan of the vitiated Doshas. There was infection in the skin lesions, to treat that Tab Sookshma Triphala 250 mg + Tab Gandhak rasayan 250 mg (Rasa shala, Pune) twice daily was given orally for 15 days. It helped to control the infection. He was also given Liq. Manjishtadi quath 7 ml orally thrice daily. For local application all over the body, a

combination of Karanj tail + Erand tail +Nim tail was used. There was 50% relief within one month of treatment. In the next month Tab Aarogyavardhini 250 mg along with Tab Kaishore guggul twice daily was advised. For the local Snehan, Shatadhaut ghrit (medicated ghee) was applied to all skin lesions. Child experienced 90% relief of symptoms within 2 months of Ayurvedic treatment. The child is still under Ayurvedic treatment for last 18 months and is symptom free. His skin lesions vanished, hair to the eyebrows and scalp were grown. (Refer to the images). He started playing with his mates in the preschool and is leading a happy normal life.



Figure 1: Before treatment.

Figure 2: Before treatment.



Figure 3: Before treatment.

Figure 4: Before treatment.



Figure 5: Before treatment.

Figure 6: Before treatment.



Figure 7: After 4 months of treatment.

Figure 8: 6 months treatment

Figure 9: 6 months treatment.



Figure 10: 8 month Ayu. Treatment.



Figure 11: One year Ayu. Treatment.

### DISCUSSION

Autosomal recessive congenital ichthyosis (ARCI) is a heterogeneous group of disorders of keratinization characterized primarily by abnormal skin scaling over the whole body. These disorders are limited to skin, with approximately two-thirds of patients presenting to severe symptoms. <sup>[6]</sup> The case was presented in severe clinical state as may be viewed from the images.

In Ayurved, Ichthyosis has been described under 'Ek-Kushta' Charakacharya mentioned 7 types of Maha-Kushta and 11 types of Kshudra Kushta and it was reiterated by Sushrutacharya. They both had described 'Ek-Kushta' under the sub classification of Kshudra

Kushta. Vagbhat described 17 Maha Kushta skin disorders and 'Ek-Kushta' was mentioned to be one of them.<sup>[7]</sup>

Sushrutacharya mentioned the description of 'Ek-Kushta' in the verse below.

Krishna-Arunam Yen Bhavat Shariram Tad Ek Kushtam Pravadanti kushstam<sup>[8]</sup> II Su.Nidan. 5/10

Charakacharya mentioned the description of 'Ek-Kushta' more clearly in the shloka below.

Aswedanam Mahavastu Yan-Matsya Shakalopamam I

.....Tadek Kushtam II Cha. Chikitsa<sup>[9]</sup> 7/21

#### Charmakhyam Ek-Kushtam cha Kitibham Savipadikam I

## Kushtam Chalsakam Dnyeyam Prayo Vata-Kaphadhikam<sup>[10]</sup> II Cha.Chikitsa 7/29

In this skin disorder, the skin is dry, without sweating, fish scales appear all over the body, that is the characteristic feature of Ek Kushta. This occurs due to vitiated doshas of Vata and Kapha.

Granthkaras commented on the Samprapti (Pathology) of the disease. Taking unhealthy food (Mitthya Aahar), Unhealthy practices (Mitthya Vihar), not following hygienic rules to keep skin and body clean, leads to low function of *Jatharagni* causing *Aam-nirmiti*. There is vitiation of *Vata* and *Kapha* doshas that cause *Dushti* of blood and skin.

Sushrutacharya mentioned inheritance of skin disorders due to defective formation of ovum and sperm in the following Shloka.

# StriPunsyoh Kushtadoshad Dushta Shonit Shukrayoh T

### Yadapatyam Tayorjatam Dnyeyam Tadapi Kushtitam II Sushrut Nidan 5/28<sup>[11]</sup>

Modern science agrees with the theory of inheritance of Ichthyosis.<sup>[12]</sup> Present case was proved to be a Autosomal recessive congenital disorder with changes occurring in to the particular gene.

Sitopaladi choorna along with Avipattikar choorna enabled the function of Deepan-Pachan and Mruduvirechan. Manjistadi quath acted as Rakta-prasadak, thereby reduced Rakta-dushti and halted the disease process.

#### CONCLUSION

It is established that the disease is incurable, we don't claim we have cured the disease but it must be said that the disease is under control and child is leading a normal life retaining quality of life.

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