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EFFECTIVENESS OF SIDDHA MEDICINE FOR THE MANAGEMENT OF ERYTHEMA DYSCHROMICUM PERSTANS (KARUNGUTTAM) – A CASE REPORT

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ABSTRACT: A 30 years male patient from Chennai has presented with asymptomatic, grey-blue hyperpigmented patches of variable shape and size and an elevated erythematous border; the eruption has been symmetrically distributed on the face, the trunk, and the upper extremities for 4 years. This condition was diagnosed as "erythema dyschromicum perstans" which resembles to *karunguttam* one of the skin diseases in siddha system of medicine. He was treated with siddha medicines as *Meganathakulikai* for purgation to rearrange three humours (*vatham, pitham & kabham*), internal medicines (*Rasaganthi mezhugu* Capsules (RGM), *Amukkarachooranam* tablet, *Seenthilsarkarai chooranam*, *Keelanelli chooranam* tablets) & external medicine (*Aruganthylam*) @ *Sirappu Maruthuvam* OPD No: 3, *Ayothidass Pandithar* Hospital, National Institute of Siddha, Chennai-47 for 48 days. There were no adverse reactions or events observed during the course of treatment. The skin lesion of EDP reduced spontaneously in the treatment period, which is compared by before & after photocopies. This is the first case report in siddha for management of EDP larger study needs to confirm these findings.

INTRODUCTION: Ramirez first discovered the Erythema Dyschromicum Perstans by finding an ashy-grey macular pigmentationin 1957 in El Salvador 1, also known as ashy dermatosis [2]. EDP is an acquired hyper-pigmentation disorder characterized by asymptomatic, polycyclic, irregularly shaped light lilac-grey patches surrounded by erythematous borders in the early inflammatory stage and subsequently greyish-blue patches in the later ashy stage. Affected areas include the trunk, neck, face, and upper extremities. Mucous membranes are spared.

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EDP occurs in children and adults, has a higher frequency noted in women, and is common among Latin American, Asian and Indian populations. The cause remains largely unknown; however, proton pump inhibitors, radioactive contrast, hypothyroidism, vitiligo and parasitic and hepatitis C infections are among the associations with EDP [3]. Isotretinoin, topical tacrolimus, dapsone, clofazimine, and NBUVB36 have been reported to be successful in some cases [1].

To date, no randomized, placebo-controlled clinical trials have been conducted to determine standard therapeutic modalities and appropriate dosing regimens for the management of EDP. A combination therapy of prednisone and isotretinoin gave a better report in the early inflammatory stage of EDP [3]. In the *Siddha* system of medicine, this condition is related to Karunguttam, otherwise

known as krishnakuttam 4, which is one kind of the kuttam or perunoi, a skin disease. According to *Siddha* literature, *karunkuttam* is a *kanmanoi*, which means 'difficulty to treat [5]. *Siddha* system of medicine has a lot of literature evidence about the management of *Karunguttam* (EDP) but is not documented clinically. Herein we report this case report of a patient diagnosed with *Karunkuttam* (erythema dyschromicum perstans) and successfully manage this condition by purgative therapy, internal & external medicines. This case reportis prepared by adhering to CARE guidelines.

Case Report: A 30 years male patient from Chennai, working as a short filmmaker came to *Sirappumaruthuvam* department opd no 3, ADH, National Institute of Siddha the complaints of hyper-pigmented lesions with lichenification in the chest, abdominal region, back of the truck. Mild pruritis, grey coloured patches present folds of both axillary regions for 4 years. He has no personal or family history of autoimmune diseases, thyroid disease, or diabetic mellitus. A patient is otherwise a healthy man with no history of sexually transmitted diseases, medications for other conditions, or long-term use of cosmetics or other topical products on the skin. He also had no history of photosensitivity or worsening skin lesions with natural sun exposure. Previously, he was diagnosed as EDP by skin biopsy, reported as "Skin with fibro collagenous tissue & adnexal structures & focal inflammatory infiltrate" in Government hospital, Rayapetta, Chennai, where the drugs Hydroxychloroquine, Zing creams were prescribed to the patient for 2 years.

Clinical Findings: On physical examination, there were N number of well-edged, oval, ash-brown macules symmetrically distributed over the back, anterior trunk, arms, and legs. Some skin lesions were measured 1 to 6 cm, Darier's sign was negative.

The rest of the physical examination was unremarkable. Siddha diagnosed tools

1. *Naa* (tongue examination)
2. *Niram* (colour of the body)
3. *Mozhi*(speech)
4. *Vizhi* (eye examination)
5. *Naadi* (pulse)
6. *Sparisam* (palpation)
7. *Malam* (stool examination)
8. *Moothiram* (urine examination) were recorded.

Clinical examination revealed the *naadi* was found to be *vathapitham* and the *neikkuri*pattern (Oil in urinesign) was "*aravenaneendathu*" i.e., snake pattern, *Niram* was ash - brown macules. The vital signs were normal. The patient was diagnosed to have erythema dyschromicum perstans based on the clinical & biopsy findings.

Treatment: According to the Siddha literature, these conditions are diagnosed as "*karunguttam*". The main objectives of the treatment were to withdraw from allopathic medicines and maintain the patient on Siddha medication, prevent recurrences, avoid precipitating factors, manage underlying disease/condition or any other associated pathology, and provide reassurance. *Bedhi Maruththuvam* (purgation therapy) is done, followed by Siddha internal medicines **Table 1.** All medicines are prescribed for 5 days once and asked to come for 5 days once for follow-up. After the treatment of 48 days, he got relief from symptoms.

TABLE 1: TREATMENT SUMMARY

S. no.	Line Of Treatment	Name of Medicine	Quantity	Adjuvants
1	Purgation	*Meganathakulikai*	2 ODS (Early Morning) (Day 1)	Hot Water
2	Internal Medicines	*Rasaganthimezhugu* Capsules (RGM)	2 BDS/ day (for 1st week only) [A.F]	Palm jaggery
		Amukkarachooranam tablet	2 TDS/day [A.F] 1gm	Milk
		Seenthilsarkarai Keelanellichooranam tablets	BDS/day [A.F] 2 TDS/day [A.F]	Milk
3	External Medicines	1)AruganThylam	100 ml Day time only	Externally

[A.F] – After Food

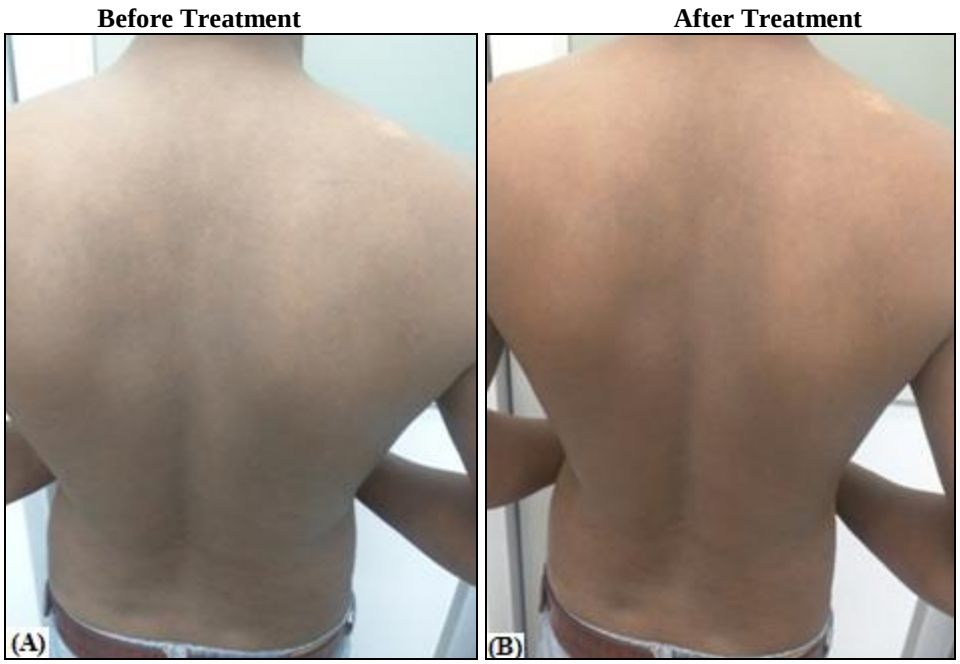

FIG. 1: (A) GREY COLOUR APPEARANCE LESION AT THE BACK OF THE TRUNK (B) DISAPPEARANCE OF THE GREY COLOUR LESION

RESULTS AND DISCUSSION: As per the Siddha system of medicine, *Karunguttam* is one of the skin diseases. All kinds of skin diseases are explained under '*Kuttam'* (skin diseases). *Karunguttam* is a *vaatham* predominant condition in three humours, *saaram, senneer* mostly affected in the patient's body in seven constitutions [6]. The treatment protocol in **Table 1** has been planned accordingly. The first line of treatment has been chosen as Purgation therapy (*Kazhichal)* because of regulates the *vaatham* and detoxication purpose [7]. To normalize the vitiated *vaatham*, therapeutic purgation was started. *Meganatha Kuligai* _260 mg (2 tablets) was chosen for therapeutic purgation. The pill was powdered, mixed with hot water, and given to the patient at 5 am in a single dose on started at 5.45 am.

The patient had nausea and passed loose stools 6times since morning. The purgation subsided in the afternoon. he was given a glass of buttermilk. The diet he took on the day of purgation was a cup of curd rice in the afternoon and 5idlis (ricecakes) for dinner. Advised the patient about the safety precautions before administration of purgation [8], regulating water and food intake to maintain the water and electrolytic balance at the duration of purgation therapy. Good improvement was noticed immediately after Purgation therapy in subjective signs & symptoms.

The internal medicines are the second line of treatment for balancing *vaatham, saaram* and *senneer*. Administration of *Rasaganthimezhugu* to balance saaram, senneer in the patient's body 9 and inhibit the formation of the benign lesion [10]. *Amukkarachooranam* has been chosen for balancing *vaatham* [11], anti-oxidant properties [12]. In *Seenthilsarkarai, seenthil* plays the main role as an immunomodulator [13], So, it is used to modulate the immune mechanism in a patient's body, *Aruganthylam* is one of the best external oils to treat skin disease in the Siddha system of medicine. *Cynodondactylon*, the major ingredient of *aruganthylam*, has acted as emollient and astringent [14]. And regulate the patient's diet, lifestyle, advised to take an oil bath weekly twice and *Nithirai Piranayaamam*.

These things will help promote the action of medicines in the patient's body and make the patient stable physically and mentally. Modern medicine, which spread to most countries in the world, used it as a marker to evaluate other systems of medicine, particularly in India. In Modern medicine, the drugs clofazimine, griseofulvin, and isotretinoin are used to treat EDP. The clofazimine was effective but demonstrated significant-to-intolerable side effects. Griseofulvin, isotretinoin, and dapsone provided unsatisfactory results as lesions recurred after discontinuation. Lasers were

largely ineffective and may cause post-inflammatory hyper pigmentation and fibrosis. Narrowband UVB (NB-UVB) phototherapy has been successfully used to treat EDP [15]. But NB-UVB may chance to produce pustular or erythrodermic psoriasis [16]. In the 48 days of treatment, the signs and symptoms of EDP are reduced figure I. In the treatment period, the patient doesn't have any complications while intake Siddha drugs. The administration of RGM capsules to the patient for only one week after withdrawal, but the rest of the medicines have been prescribed every visit. The signs and symptoms are well managed by the rest of the siddha medicines **Table 1**. The prognosis of the disease is documented &shown in **Fig. 1**

CONCLUSION: EDP, a rare condition in the human population, will suffer the patient's body and mind because the management of EDP is difficult. Siddha medicines will manage it as per Siddha's basic principles. It is the first case report to document the efficacy of Siddha medicines for the management of EDP. Larger studies need to confirm these finding

Patient Perspectives: The patient self-reported that he was highly satisfied with the treatment as he had realized disappearing skin lesions. Before the treatment period, the patient hesitated to face his colic's, after the treatment period he feels strong in mental health

Informed Consent: Written informed consent was obtained from the patient. The patient has given her consent for his images and other clinical information to be reported in the Journal. The patient understands that their name and initials will not be published and due efforts will be made to conceal the identity, but anonymity cannot be guaranteed.

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