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PREVALENCE AND CLINICAL CHARACTERS OF VITILIGO - A COMMON SKIN DISORDER

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ABSTRACT
Vitiligo is an acquired cutaneous disorder of pigmentation, with an incidence of 0.5% to 2% worldwide. There are three major hypotheses for the pathogenesis of vitiligo that are not exclusive of each other: biochemical/cytotoxic, neural and autoimmune. Recent data provide strong evidence supporting an autoimmune pathogenesis of vitiligo. As vitiligo can have a major effect on quality of life, treatment can be considered and should preferably begin early when then disease is active. Current treatment modalities are directed towards stopping progression of the disease and achieving repigmentation. Therapies include corticosteroids, topical immunomodulators, photo (chemo) therapy, surgery,combination therapies Vitiligo is an acquired skin disorder caused by the disappearance of pigment cells from the epidermis that gives rise to well defined white patches which are often symmetrically distributed. The lack of melanin pigment makes the lesional skin more sensitive to sunburn. Sunscreens and good guidance may help the patient cope better with the disease. Vitiligo can be cosmetically disfiguring and it is a stigmatizing condition, leading to serious psychologic problems in daily life. It occurs worldwide in about 0.5% of the population and it occurs as frequently in males as it does in females. The cause is unknown, but might involve genetic factors, autoimmunity, neurologic factors, toxic metabolites, and lack of melanocyte growth factors. As vitiligo can have a major effect on quality of life, treatment can be considered and should preferably begin early when then disease is active. Many treatments have been used for some time; however; there are some new developments: narrowband ultraviolet (UV) B (311nm) therapy, the combination of corticosteroid cream + UVA therapy, and the transplantation of autologous pigment cells in various modalities.

KEYWORDS: Vitiligo, Melanocytes, Autoimmunity.

INTRODUCTION

Human skin has different hues in different parts of the world. The colour of the skin in due to a pigment called Melanin, which is more in coloured people. The pigment increases when the parts are exposed to sun or ultraviolet rays. When this pigment decreases, the skin turns white. Any part may be effected. Two in every hundred people are effected by this disease and over half of these people are under the age of 20 years. Children of parents where one or both have Leucoderma are at a fraction of a higher risk than the general population. Even the general population is at a risk of 1-2% leucoderma even with no family history for generation, any normal and fit person too stands a chance of 1-2% of developing Leucoderma.

Leucoderma, which causes white patches on the skin has been known for centuries through it is not contagious, it cause a lot of embarrassment, particularly in females who regard it as a social stigma. Hence, from a cosmetic point of view, its treatment is important.[1]

Review of Literature

The integument or skin is the largest organ of the body making up 16% of body weight, with a surface area of 1.8M^2. It has several functions, the most important being to form a physical barrier to the environment, allowing and limiting the inward and outward passage of water, electrolytes and various substances while providing protection against micro-organisms UV radiation, toxic agents and mechanical insults. There are three structural layers to the skin, the epidermis, the dermis and sub cutis. Hair, nails, sebaceous, sweat and apocrine glands are regarded as derivatives of skin.[2] Skin is a dynamic organ in a constant state of change, as cells of the outer layers are continuously shed and replaced by inner cells moving up to the surface.

Leucoderma or white skin is the name given to a skin disease where in there is a gradual loss of the pigment, melanin, from the skin layers, resulting in the appearance of white patches. Leucoderma is a condition in which the

skin layers experience loss of skin pigment. It is more common in women than in men and is mostly seen on the hands, neck, back and wrist. Though the disease does not cause any organic harm, the patches surely look ugly and upsetting. Known as vitiligo, leucoderma can effect people of any age and sex and can be seen on any kind of skin.[3] Contrary to the popular belief, the disease is neither infectious nor contagious and is not caused due to any germs or bad blood. Vitiligo is a widespread disorder now a days generally it happens due to auto immunity which is the most known reason. Depigmentation of skin happens first which acquires skin area in shape of a spot or patch forming vitiligo spots, no one can predict its spreading.[5,7] Some persons holds one patch for whole life and another person can suffer vast spreading. This all depends on how far a person's immunity is affected. Facial vitiligo is a very bad situation in the life of a vitiligo patient. As the face gets a white spot, it almost disturbs the psychosomatic state of the persons mind. One can feel embarrassed and get into depression after the on set of facial vitiligo.[6] A strong family history increases the chance of spread. It is transmitted by a recessive allele.

The common causes of leucoderma are Excessive mental stress,Chronic or acute gastric disease can also contribute, Person who has impaired hepatic functions as in jaundice,Worm infestations or other parasitic infestations in the alimentary canal, Pressure from tight clothes or certain occupational hazards like wearing certain rubber hand gloves, using tattoos over the skin etc.

the main symptoms include Alopecia (loss of hair), premature graying of hair,The whiteness generally starts as a small discoloured white or pale or brown spot that spreads and becomes white day-after-day and finally becomes milky white, There might be general weakness and lassitude and a person has sensitivity towards cold,Hair on the spot also becomes white, White patches are the characteristic signs which appears gives a signal that the person is suffering from leucoderma.[8,9]

The white patch will in all probability be leucoderma if it Has an outline darker than the skin , irregular in appearance, gradually increase in size, appears milky white under an ultraviolet light. There is no cure for leucoderma, and any doctor promising a cure is sure to be a quack! At the most, the patches can be coloured to match the skin, but this will not stop new patches from occurring. Currently no acceptable permanent means to this process. Laser assisted melanocyte transplant method is followed recently.[4]

There are many Home remedies can cure leucoderma and avoid consuming highly antigenic material like fish, meat and eggs.

MATERIALS AND METHODS

- A survey method is followed. The data is collected from the patients of Susrutha Hospital, Eluru and Sanivarapu peta village.

RESULTS

Table I: Percentage of the sample.

S.No	Sex	Percentage of the sample
1	Female	30
2	Males	70

Graph –I

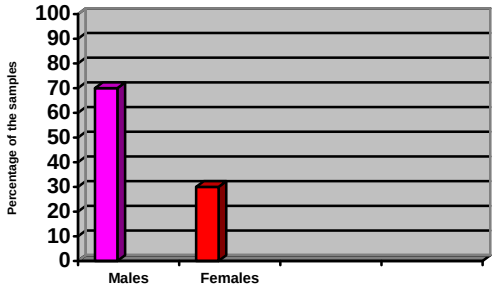


Table 2: Percentage of different age groups effected.

S.No	Age group	Percentage of the Persons effected
1	10-20	20%
2	21-30	10%
3	31-40	20%
4	41-50	10%
5	51-60	20%
6	61-70	20%

Graph-2

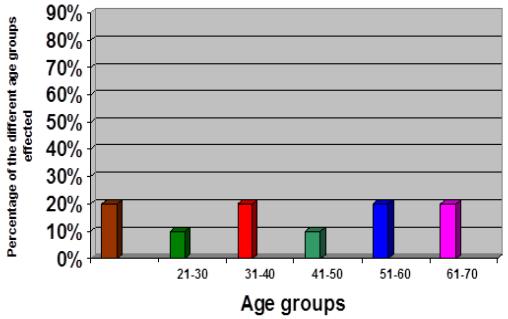


Table 3: Percentage of subjects with and without family history.

S.No	Percentage of the subjects with family history	Percentage of the subjects with no family history
1	90	10

Graph – 3

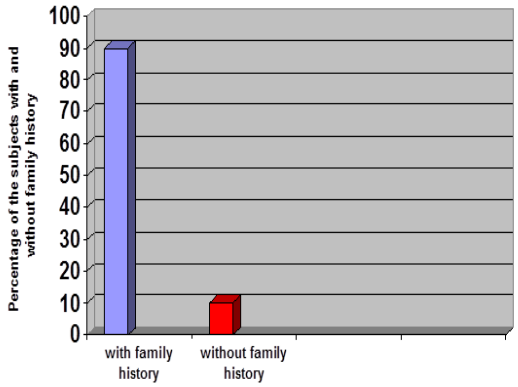


Table 4: Leucoderma – causes.

S.No	Causes	Percentage of the subjects
1	Dysentery	80%
2	Worm infection	60%
3	Breathless ness	40%
4	Diabetes	40%
5	Typhoud	40%
6	Past history of tuberculosis	40%
7	Mental stress	40%
8	Leucoderma	20%
9	Pneumonia in childhood	20%
10	Repeated vaccination	20%
11	Chicken pox	20%
12	Measles	20%
13	Malaria	20%

Graph-4

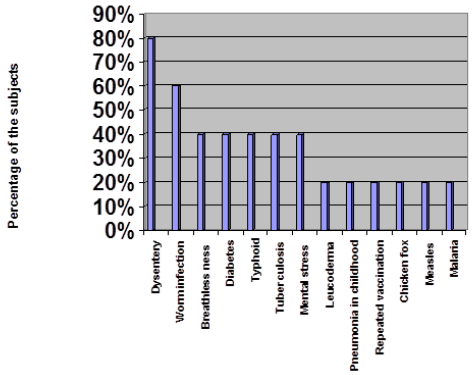
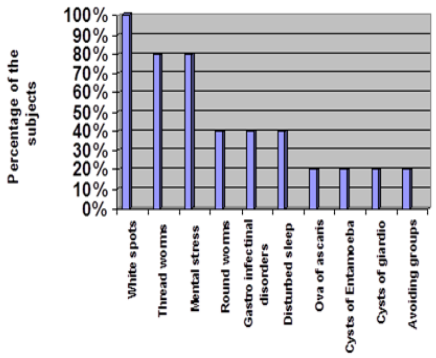


Table 5: Leucoderma – symptoms.

S.No	Symptoms	Percentage of the subjects
1	White spots	100
2	Thread worms	80
3	Round worm	80
4	Mental stress	40
5	Gastro intestinal disorders	40
6	Disturbed sleep	40
7	Ova of Ascaris	20
8	Cysts of Entamoeba	20
9	Cysts of Giardia	20
10	Avoiding groups	20

Graph-5



DISCUSSION

- Table-1 shows that in the study 30% are female and 70% are males.
- In table-2, It is observed that 10-20 age groups are 20%, 21-30 age groups are 10%,31-40 age groups are 20%,41-50 age groups are 10%, 51-60 age groups are 20%, 61-70 age groups are 20%
- In Table 3, It is observed that in the study 90% of the subjects are with family history of Leucoderma.
- Table – 4 shows that 80% of the subjects suffered from Dysentery, 60% of the subjects suffered from Worm infection, 40% of the subjects suffered from Breathless ness, 40% of the subjects suffered from Diabetes, 40% of the subjects suffered from Typhoid, 40% of the subjects suffered from Tuberculosis, 40% of the subjects suffered from Mental stress, 20% of the subjects suffered from Leucoderma, 20% of the subjects suffered from Pneumonia in childhood, 20% of the subjects suffered from Repeated vaccination, 20% of the subjects suffered from Chicken pox, 20% of the subjects suffered from Measles, 20% of the subjects suffered from Malaria at one time (or) the other
- In Table 5, It is observed that 100% of the subjects showed white spots on the body, In the stool examination, the following pathogens are noticed more frequently, 60% of the cases are with Thread worms, 40% of the cases are with Round worms, 20% of the cases are with Ova of Ascaris, 20% of

the cases are with Cysts of Entamoeba, 20% of the cases are with Cysts of Giardia.

- Other symptoms include:
- 80%of the cases suffered from Mental stress, 40% of the cases suffered from gastro intestinal disorder, 40% of the cases suffered from Disturbed sleep, 20% of the cases are avoiding groups.

CONCLUSION

- Exposure to sun may tan the skin, so makes the spot look more prominent. Exposure to harsh sunlight should be avoided. If the person experiences sun burn (or) discomfort, the patient should use sun block cream or full cloth or use an umbrella. Exposure of spot to rising sun and setting sun is useful. Gentle sunlight helps for natural repigmentation. Paste of babuchi (psoralea) seeds and vinegar, raddish paste, Turmeric with mustard oil, Red clay can be applied to these spots for better results. Avoid smoking, caffeine, Red meat. Adapt low fat, high fiber diet. Take well balanced diet of seeds, nuts, grains, vegetables, and fruits. Drink more water. To help stabilize immune system in conjunction with other traditional treatment, take supplements like folic acid, vitamin-D, vitamin-B12, copper, zinc.

Lead a stress free life. Do not feel embarrassed, depressed or worried about how others will react. Do not avoid social situations and partner. Let people around you know once and for all that you have some colour problem with your skin.

CONCLUSION

Leucoderma is not a threat to health. It is not a contagious disorder and cannot spread to other by touch. It has more of cosmetic angle which may or may not lead to psychological stress. Apart from making a change in appearance, it does not harm in any way. It is a paradox that people can accept their life partners having diseases like asthama, diabetes, allergies etc, But not a benign condition like leucoderma. Therefore family members, friends and support groups can play a major role in dealing with the sensitivity around the issue and encouraging the victim to act normally without inhibitions. As civilized persons, it is our duty to have a healthy outlook towards those suffering from leucoderma. “Live a long, healthy and stress free life”

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