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OVERVIEW ON VITILIGO (SKIN DISEASE)

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ABSTRACT

A disease that causes the loss of skin colour in blotches. Vitiligo occurs when pigment-producing cells die or stop functioning. It 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. 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.

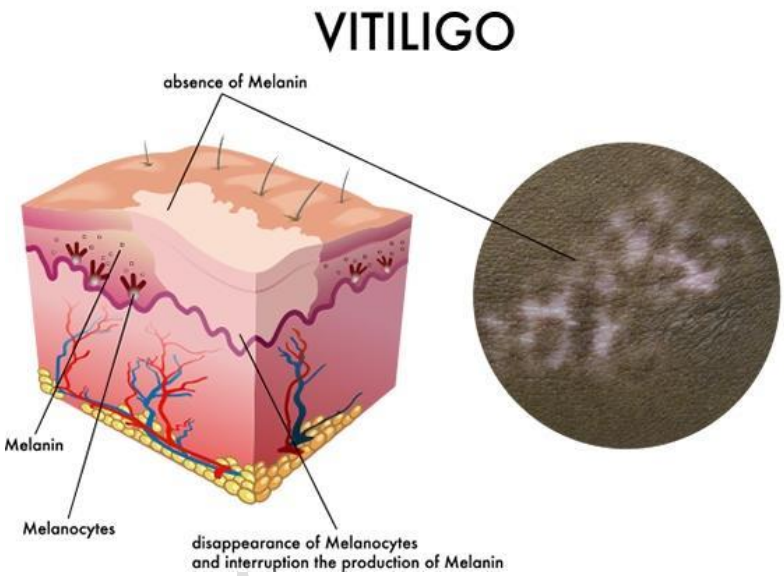
KEYWORDS:-

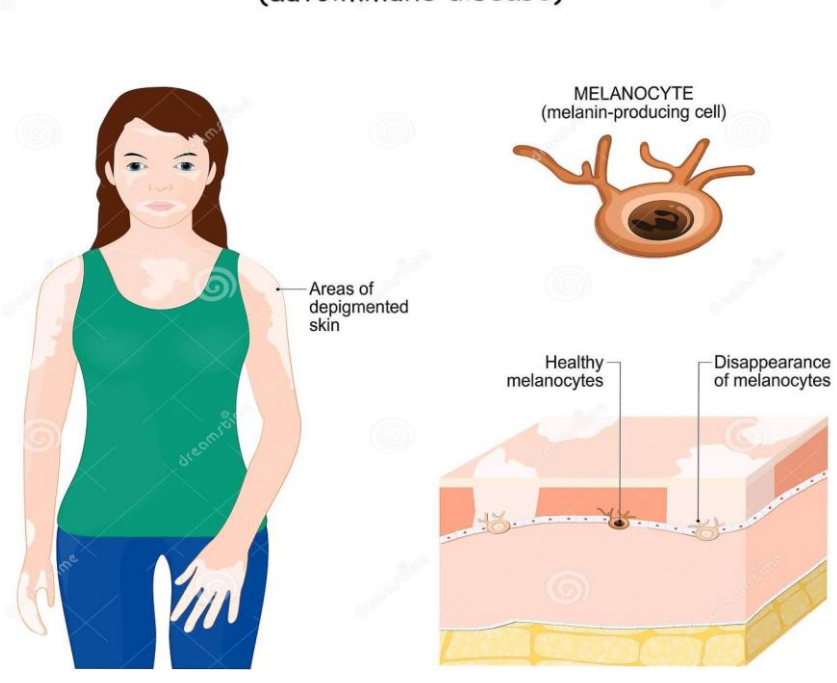
- Grafting
- Melanocytes
- White patches
- genetically occur
- Depigmentation.

INTRODUCTION

Vitiligo is an acquired pigmentary skin disorder by the absence of pigmentary cells from the epidermis that results in white macules and patches on the body. The condition is usually associated with few autoimmune disorders, with thyroid abnormalities are the commonest one. The etiology of vitiligo is unknown but there are different theories to explain its pathogenesis. Vitiligo presents clinically with signs and symptoms of white spots on the body

distributed symmetrically and more obvious in people with dark skin. The lesions are characterized by well-demarcated pearly white or depigmented macules and patches, oval, round, or linear-shaped, and the borders are convex, range from the size of few millimeters to centimeters and enlarge centrifugally. There are different clinical variants of vitiligo which are Trichrome, Marginal inflammatory, and Quadrichrome vitiligo. Koebner phenomenon(Development of vitiligo at specific trauma prone sites, like cut, burn, or abrasion)is also a common clinical manifestation. Initial lesions occur most frequently on the hands, forearms, feet, and face, favoring a periocular or perioral distribution.





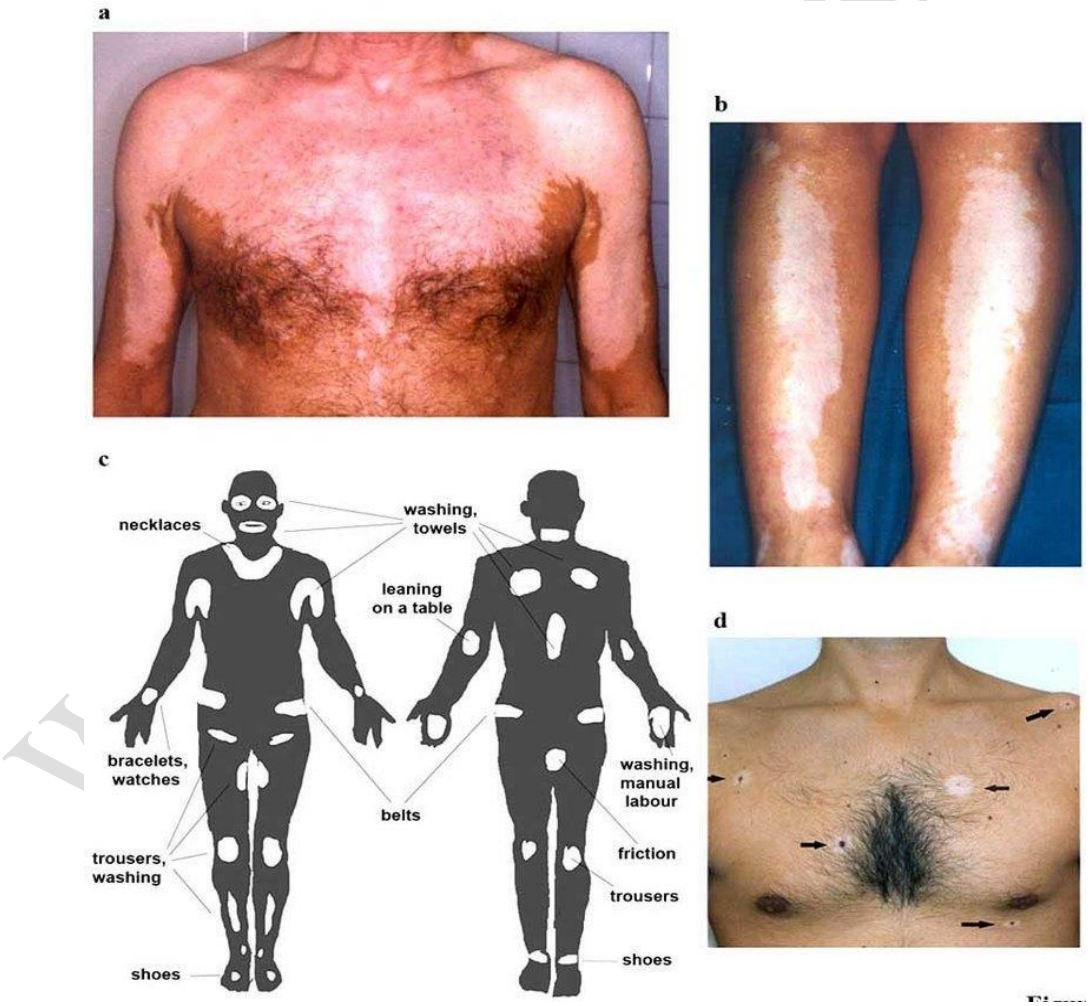
Vitiligo is an acquired chronic pigmentary disorder affecting the melanocytes, mainly in the skin and mucosae. It occurs due to the dynamic interaction between genetic and environmental factors leading to autoimmune destruction of melanocytes. Defects in melanocyte adhesion and increased oxidative stress further augment the immune response in vitiligo. It is a cosmetically disfiguring condition with a substantial psychological burden. Its autoimmune nature with resultant chronicity, variable responses to therapeutic modalities, and frequent recurrences have further diminished the quality of life.

There are 2 main types of vitiligo:

1) Non-segmental vitiligo.

2) Segmental vitiligo.

1) Nonsegmental vitiligo



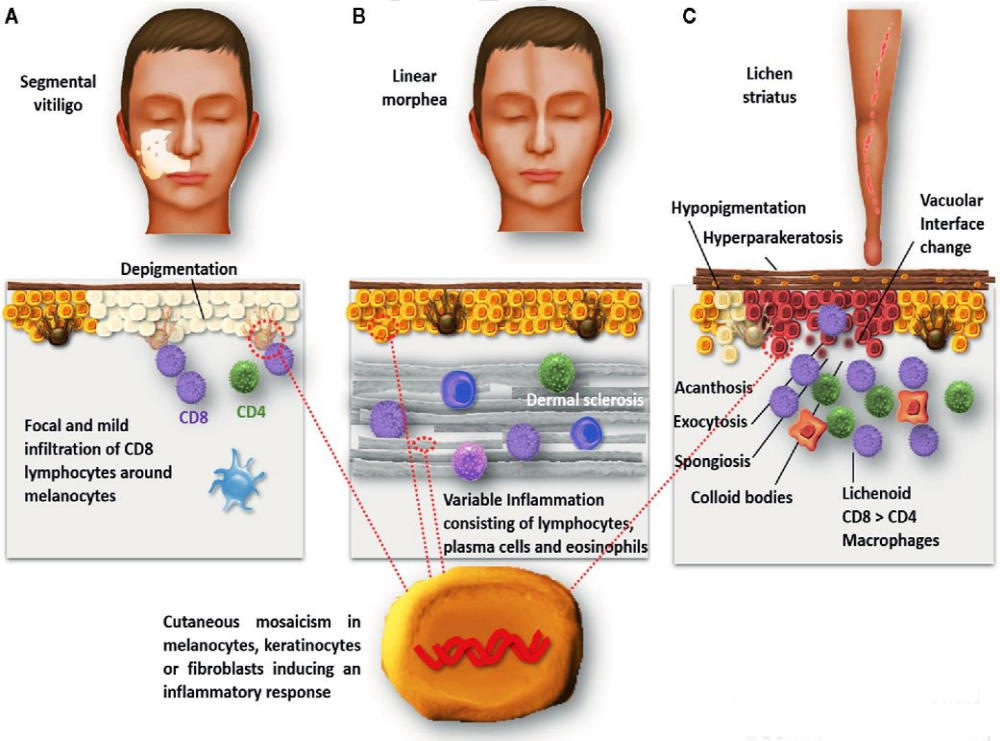
is a depigmented skin disorder showing acquired, progressive, and depigmented lesions of the skin, mucosa, and hair

2) Segmental vitiligo

People who have this type tend to see rapid color loss on one side of the body.

Auto immunity in segmental vitiligo:-

Pathogenesis:-



CD8:- Cluster of differentiation 8 cell

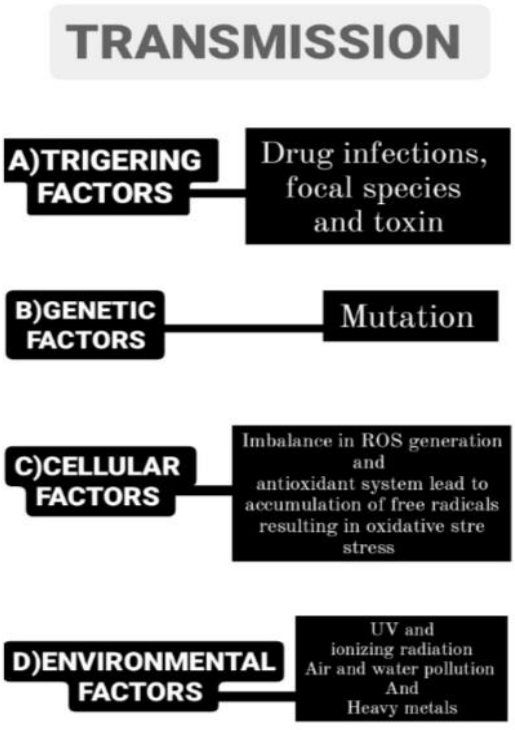
HISTORY

Vitiligo around 4000 years of known history elapsed from the time man became aware of disturbing white spots on the skin until the melanocyte was finally identified as the responsible actor for depigmentation and other pigmentary disorders. In the patient presenting for the first time with patches of skin depigmentation, a thorough history and physical examination should be performed, including examination under the Wood's lamp in order to rule out other potentially life-threatening disorders. The initial onset of the condition may be abrupt, however, afterwards it usually progresses slowly, with expansion of skin depigmentation with no concomitant symptoms.

TRANSMISSION

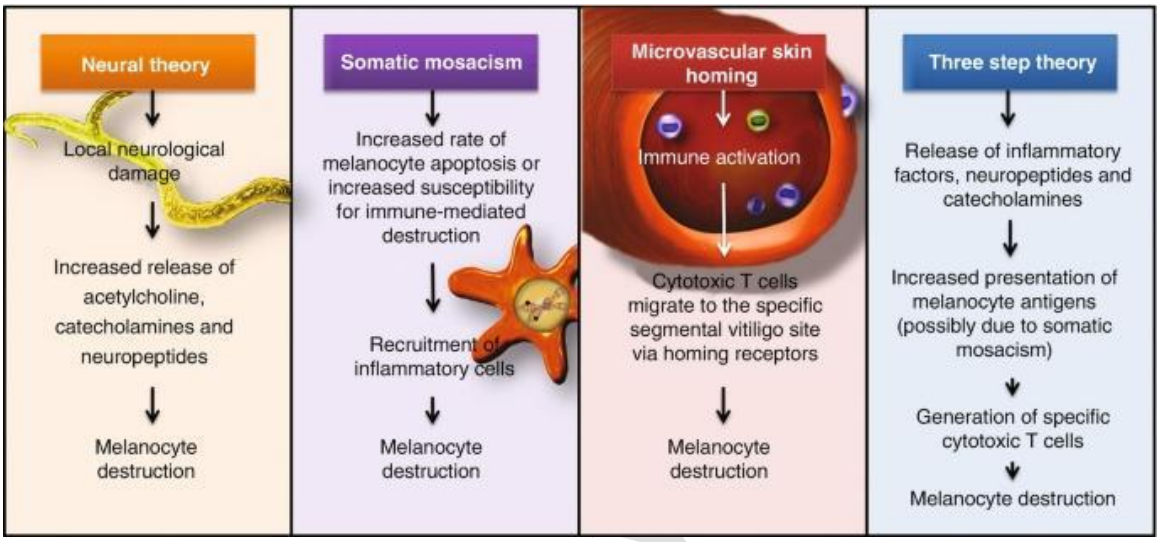
Vitiligo is non-contagious and does not spread by contact.

However, there is no profound evidence on what exactly causes vitiligo or how it appears at any age, in any gender. However, it is said that vitiligo 'runs in families', which means it has some genetic basis to it but the inheritance of the disease is multifactorial and involves the interaction of multiple genes combined with multiple other causative factors. Hence, it cannot be said with complete certainty whether the person with a family history of vitiligo will develop it or not. In fact, only 30% of people with vitiligo have a family member suffering from it.



PATHOGENESIS

Vitiligo pathogenesis begins with altered melanocytes that exhibit an elevated cellular stress response. This triggers autoimmunity, which targets melanocytes for destruction, resulting in focal depigmentation. Repigmentation requires the growth and migration of melanocytes, typically from hair follicles.



SIGNS AND SYMPTOMS

1) Patchy loss of skin color, which usually first appears on the hands, face, and areas around body openings and the genitals
2) Premature whitening or graying of the hair on your scalp, eyelashes, eyebrows or beard
3) Loss of color in the tissues that line the inside of the mouth and nose (mucous membranes)
4) Vitiligo can start at any age, but usually appears before age 30.

Depending on the type of vitiligo you have, it may affect

- Nearly all skin surfaces. With this type, called universal vitiligo, the discoloration affects nearly all skin surfaces.
- Many parts of the body. With this most common type, called generalized vitiligo, the discolored patches often progress similarly on corresponding body parts (symmetrically).
- Only one side or part of the body. This type, called segmental vitiligo, tends to occur at a younger age, progress for a year or two, then stop.
- One or only a few areas of the body. This type is called localized (focal) vitiligo. The face and hands With this type, called acrofacial vitiligo, the affected skin is on the face and hands, and around body openings, such as the eyes, nose and ears.

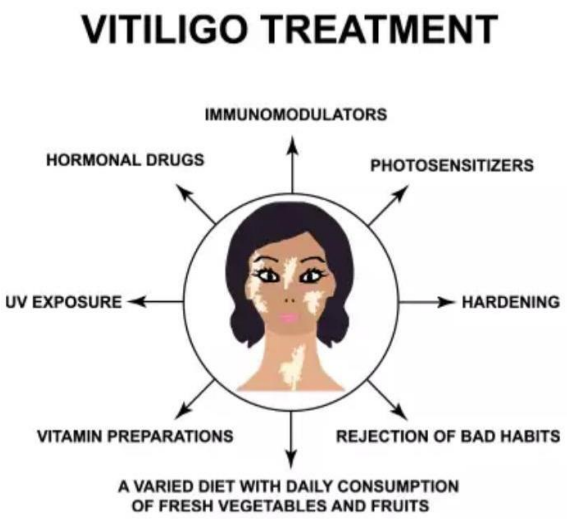
DIAGNOSIS

To diagnose vitiligo, your doctor will ask about your family history and perform a thorough physical exam.

The exam may include a close evaluation of your skin.

Sometimes doctors use a Wood's lamp, also known as a black light, which is an ultraviolet light that the doctor shines on your skin.

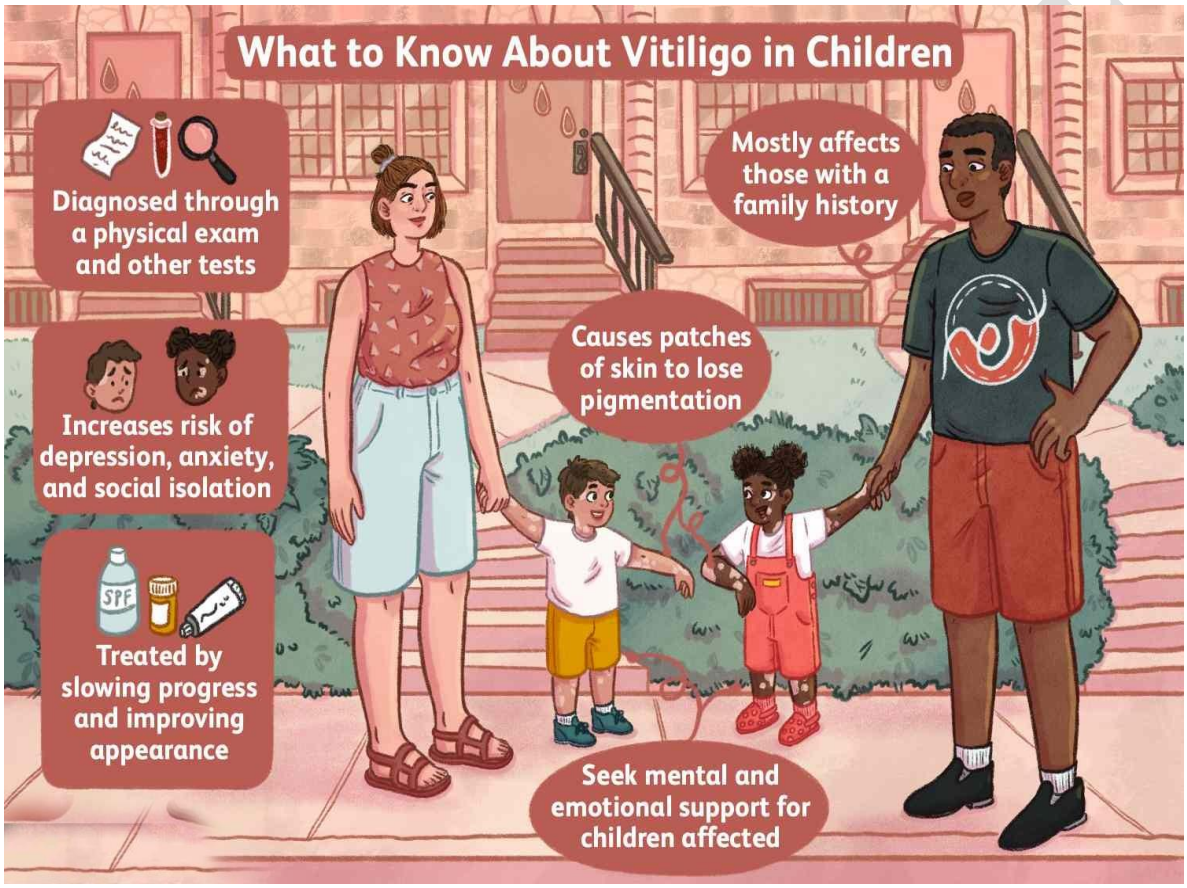
TREATMENT



TREATMENT OPTIONS

Special Considerations in Children with Vitiligo

Childhood vitiligo differs from adult-onset vitiligo for several features including increased incidence of the segmental variant, higher prevalence of halo nevi, and more common family history for autoimmune diseases and atopic diathesis. The major differential diagnoses are the postinflammatory hypomelanoses for nonsegmental vitiligo and nevus depigmentosus for segmental vitiligo. From a therapeutic standpoint, early awareness of the diagnosis seems to correlate with a good treatment outcome in this age group.



CONCLUSION

Vitiligo can be triggered by stress to the melanin pigment-producing cells of the skin, the melanocytes. The triggers, which range from sunburn to mechanical trauma and chemical exposures, ultimately cause an autoimmune response that targets melanocytes, driving progressive skin depigmentation.

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