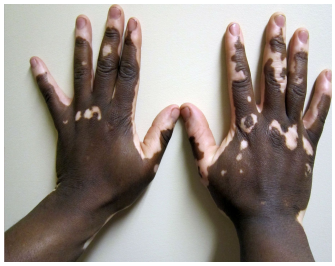
VITILIGO

Vitiligo is a skin condition which results in loss of epidermal melanocytes, leading to depigmented lesions surrounded by normal skin.

About 20% of patients develop vitiligo before age 8, with a mean age of onset of 4-5 years of age.

PRESENTATION

- **Depigmented macules and patches**: various shapes and sizes, well-circumscribed
- **Stable or progressive**
- **Segmental, non-segmental** or **mixed types**
- **Common locations**: face, scalp, acral surfaces, extensor surfaces, genitalia
- **Leukotrichia**: white hair **indicator of poor prognosis*



ETIOLOGY

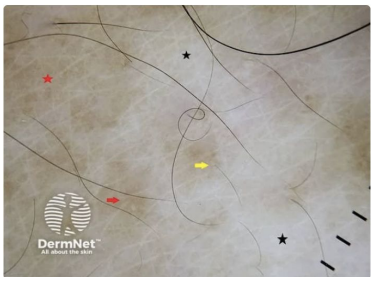
**The etiology of vitiligo is unclear, but likely multifactorial:*

- **Autoimmune destruction of melanocytes:** *~20% of patients have autoimmune diseases*
- **Genetic predisposition**: *up to 50% of patients have +FHx*
- **Skin injury**: sunburn, exposure to chemicals in household products and dyes
- **Intrinsic defects of melanocytes:** early apoptosis, defective cell-to-basement membrane adherence

DIAGNOSIS

*****Clinical diagnosis*** *in most cases. If diagnosis is uncertain:*

- **Dermoscopy**: white structureless areas with a typical glowing appearance, perilesional and perifollicular hyperpigmentation, and/or leukotrichia
- **Wood lamp examination**: vitiligo lesions appear as well-defined bright blue-white areas
- **Skin biopsy**: absence of melanocytes, perilesional lymphocytes



Dermoscopic features of vitiligo

MANAGEMENT

*Vitiligo that begins in childhood may cause **psychological trauma**. Children with vitiligo can experience **depression**, **anxiety**, **body-image concerns**, **low self-esteem**, and **rejection among peers**. Therefore, treating vitiligo involves medical interventions that can **restore pigmentation**, and **psychosocial supports** to improve quality of life.*

Limited Disease:

- **Topical Calcineurin Inhibitors (TCI):**
  - Immunomodulators, inhibit cytokine expression
  - Used on sensitive areas (face, skin folds)
  - i.e. tacrolimus 0.1% or pimecrolimus 1%
- **Topical Corticosteroids:**
  - Anti-inflammatory and immunosuppressive
  - Short-term use, or alternating with TCI
  - i.e. clobetasol 0.05%, mometasone 0.1% cream or ointment

**Consider intralesional corticosteroids for small areas*

Extensive or Refractory Disease:

- **UVBnb Phototherapy**
  - Reduces inflammation and stimulates melanocyte production
- **Topical JAK inhibitors (i.e. Ruxolitinib)**
  - blocks JAK-STAT pathway, allowing melanocytes to repopulate
- **Oral Corticosteroids**
  - Short term use, for widespread disease
- **Skin graft or melanocyte transplant**
  - for refractory disease and significant cosmetic concerns

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