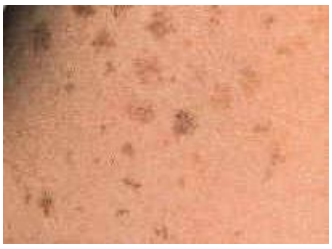
# Hyperpigmentation

## What is Hyperpigmentation?

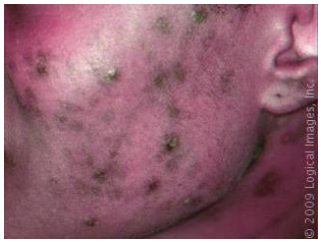
A skin condition in which patches of skin becomes darker than the surrounding region. Increased melanin (dark skin pigment) deposits in the skin leads to hyperpigmentation.

## Types and Causes of Hyperpigmentation

**Melasma or Chloasm** is commonly caused by hormonal fluctuation. It is usually seen in pregnant women as darkening of the skin on the stomach or face. It is also known as "mask of pregnancy" and is caused by over production of melanin. Oral contraceptives also have the tendency to cause Melasma and may resolve upon discontinuation of the pills.



**Age Spots** are commonly caused by the harmful rays of the sun. Age spots, or liver spots, are also known as solar lentigines. Age spots are similar in appearance to melasma, but are smaller and are more common on areas of the body that is exposed to the sun, such as, hands, face and neck.




**Acne or other inflammatory diseases** can also cause change in pigmentation along with scaring. Post inflammatory processes lead to an increase in the production of melanin.

Various **Drugs** can cause hyperpigmentation, hypopigmentation or dyspigmentation and are due to drug deposits in the skin, increased melanin production and/or postinflammatory changes to the skin. Common classes of drugs are antimalerials, chemotherapeutics, tetracyclines, amiodarone, and antipsychotic drugs.

Treatment for Hyperpigmentation is usually long term and may take weeks before any noticeable changes are seen. It is very important to continue with the regimen. Sun tends to reverse/delay the effect of treatment, therefore it is advised that patients wear sun block to maintain efficacy of treatment and to avoid further damage to the skin. Use at least SPF 30 sunscreen daily.

## Prevention

1. Wear sunscreen lotion daily, even in winter months
2. Wear protective clothing, such as hats and long sleeve shirts
3. Maintenance treatment with hydroquinone
4. Consume diet rich in iron, calcium, and carotene

## Treatment Options:

**Hydroquinone**: Decreases concentration of melanin. Hydroquinone 2 % is available over the counter but is not as effective as prescription strength.

**Azelaic Acid**: Reduces free radical production and decreases production of melanin. It does not affect normal skin

**Retinoids:** Vitamin A derivatives, such as tretinoin. Decreases production of melanin and increases cell turnover. Increases absorption of other topical agents used for skin lightening.

**Kojic Acid:** Inhibits melanin formation, used in combination with corticosteroid to decrease irritation.

**Glycolic Acid:** used in chemical peels, works as an exfoliating agent.

**Laser Removal:** Various treatment options, such as resurfacing, chemical peel, and dermabrasion are available based on skin type and condition. Consultation with a plastic surgeon is recommended.

One of the available compounded formulas for hyperpigmentation is Kligman's Formula. It is composed of Retinoic acid, hydroquinone and corticosteroid

## References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