An Initiative of

# **Topical treatments**

- Various skin lightening creams are used in Melasma. Hydroquinone (2–4%) based formulations applied accurately to pigmented areas at night for 2–4 months is useful.
- The most successful formulation has been a combination of hydroquinone, tretinoin, and moderate potency topical steroid. This has been found to result in improvement or clearance in up to 60–80% of those treated.
- Various new agents under investigation include zinc sulfate, mequinol, resveratrol, 4-hydroxy-anisole, 2,5-dimethyl-4-hydroxy-3(2H)-furanone and/or N-acetyl glucosamine and methimazole.

### Oral treatments

 Oral medications for Melasma are under investigation, including tranexamic acid and glutathione.

# **Procedural treatments**

Chemical peels with glycolic acid, lactic acid, laser therapy with pigment lasers (Q-switched Nd YAG, Q- switched ruby and Alexandrite devices) intense pulsed light (IPL), carbon dioxide or erbium: YAG resurfacing lasers, mechanical dermabrasion and microdermabrasion are used in resistant cases.

## 8. Can Melasma be cured? Can Melasma recur?

- Melasma cannot be fully cured, however multiple treatment options available can improve the appearance.
- Melasma tends to recur and recurrence rates are higher if sun protective measures are not adequately followed.

# MELASMA



# INDIAN ASSOCIATION OF DERMATOLOGISTS, VENEREOLOGISTS AND LEPROLOGISTS

- What is Melasma?
- How does one get Melasma? What are the predisposing factors for Melasma?
- Is Melasma hereditary?
- How does Melasma appear?
- What should one do if he/she gets Melasma?
- Are there any tests to confirm Melasma?
- How can Melasma be treated?
- Can Melasma be cured? Can Melasma recur?

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#### 1. What is Melasma?

- Melasma (derived from Greek word- melas) is an acquired pigmentary condition of sun- exposed skin, often manifesting as dark patches.
- Another term is chloasma which is often used to describe Melasma developing during pregnancy.



#### 2. How does one get Melasma? What are the predisposing factors for Melasma?

- What causes Melasma is not yet clear. It is likely to occur when the colour-making cells in the skin (melanocytes) of the affected areas produce too much colour.
- Common contributory factors include sun exposure, pregnancy, drugs such as phenytoin, oral contraceptive pills or hormone replacement therapy, family history, hypothyroidism and thyroid autoimmunity.

#### 3. Is Melasma hereditary?

No, Melasma is not hereditary, however it is common in other family members.

#### 4. How does Melasma appear?

- Melasma appears more commonly in women than men.
- It appears as brown, grey or black patches affecting the sun-exposed areas.
- Cheeks, forehead, upper lip, nose and chin, are involved usually in a symmetrical manner.
- Often, it may be limited to the cheeks and nose area. Other sun-exposed areas such as the neck and the forearms are uncommonly affected.
- The skin lesions are not itchy, but poses a significant cosmetic problem.

#### 5. What should one do if he/she gets Melasma?

- All dark patches on the face are not Melasma.
- Consult a dermatologist who will confirm the diagnosis and start appropriate treatment.
- Self- medication with steroid containing creams should be strictly avoided.

#### 6. Are there any tests to confirm Melasma?

- Melasma is usually diagnosed by the clinical appearance of skin lesions.
- A dermatologist can confirm the diagnosis by simple examination with a Wood's lamp or dermatoscope.
- Occasionally skin biopsy may be needed to differentiate Melasma from other pigmentary conditions.



#### 7. What is the treatment for Melasma?

Melasma responds poorly to treatment. Generally sun protection measures along with a combination of various treatment modalities (topical, oral, and procedural) is helpful.

#### General measures

- Year-round life-long sun protection: Use broad-spectrum very high protection factor (SPF 50+) sunscreen applied to the whole face every day. It should be reapplied every 2 hours if outdoors during the summer months. Alternatively or as well, use a make-up that contains sunscreen. Wear a broad-brimmed hat.
- Discontinue hormonal contraception.
- Camouflage with skin creams may help to reduce the cosmetic problem.