

## CLINICAL SKILLS: PHOTOTHERAPY TREATMENT

*Depending on how much dermatology your medical school covers, it is quite possible that you may come across OSCE stations where you have to counsel patients on some of the more specialist treatment options for skin conditions. Phototherapy is used for multiple different disorders and there are a number of key areas which need to be discussed when referring to it.*

### What is phototherapy?

- Phototherapy is when special wavelengths of light are used to treat certain skin disorders
- It may involve treating the whole body or small portions of the body
- It acts to slow down excessive skin growth

### What types are there?

1. Psoralens with ultra violet A light (PUVA)
  - More effective than UVB
  - But more likely to cause skin cancer, especially squamous cell carcinoma
2. Ultraviolet B light (UVB)
  - Can be used to treat children and pregnant women, unlike PUVA

### What can it be used to treat?

- It can be used to treat eczema and psoriasis that has not responded to first line treatments
- Mycosis fungoides
- Vitelligo
- Basal cell carcinoma
- Actinic keratoses
- Bowen's disease
- Alopecia areata

### How is it done?

- There are many specialist dermatology units around the UK that provide PUVA/UVB therapy
- Patients should be advised to **not** just book sessions in local sunbed facilities. Only proper dermatological centres should be used, as these carefully monitor the amount of exposure to ultraviolet light that patients receive and ensure patients are not given unsafe doses
- Generally, it is administered 2-3 times per week for a total of 8 weeks
- PUVA:
  - 2 hours before, you take a pill or 30 minutes before, rub on a lotion containing psoralens
  - You are asked to wear goggles during treatment and for 24 hours afterwards
  - Then you enter into a box, which provides the light rays
  - You stay in it for 10 minutes

- After treatment, must wear goggles, protective clothing and thick sun screen for 24 hours after treatment
- UVB:
  - Similar to PUVA but no goggles or psoralens required

**Are there any side effects?**

- Treatment is limited to a total of 200 sessions over a life time, and this is because of the potential side effects
- These include:
  - Short term effects:
    - Sunburn if too much dosage is given – redness, blistering, pain
    - UVB can cause the skin condition to initially worsen before it improves (patients should be warned of this)
  - Long term effects:
    - Premature skin ageing
    - Formation of sun spots
    - Risk of skin malignancy
- Psoralens can also cause:
  - Short term nausea
  - Headache

**Are there any contraindications?**

1. Personal past medical history of skin malignancy
2. Family history of skin malignancy (depending on type/severity)
3. Photosensitive comorbid condition:
  - Systemic Lupus Erythematosus
  - Porphyria cutanea tarda
  - Albinism
  - Xeroderma pigmentosum
4. Taking photosensitive medication. Common examples include:
  - Isotetrinoin
  - Amiodarone
  - Tetracyclines
5. Pregnancy and breast feeding for PUVA
6. Very fair skin – 'type 1' and 'type 2' skin in particular

**How long will the effects last for?**

- Usually around 3-6 months but for some patients can last for over a year

**To conclude the consultation:**

- Thank the patient
- Ask them if they have any further questions
- Provide with further written information or relevant links