

British Photobiology Group Position Statement:

Home Phototherapy

Background

Narrowband UVB (NB-UVB) phototherapy is the use of narrowband UVB ultraviolet light to treat skin disease. This is the main form of phototherapy used in the United Kingdom (UK) to treat inflammatory skin disease, including psoriasis and atopic eczema.

There is increasing evidence for the cost efficacy of narrowband UVB phototherapy^{1,2} but convenience and availability remains an issue, which prevents patients accessing an effective and safe treatment. The use of home phototherapy was first reported for patients with psoriasis in 1979.³ A multi-centre randomised controlled non inferiority trial (PLUTO study) in 2009 comparing home with hospital based phototherapy for psoriasis, showed home phototherapy to be equally safe and effective and a cost effective method of treatment delivery. Those treated at home also reported a lower burden of treatment and greater patient satisfaction.⁴ A large study from Ninewells Hospital which included patients with a variety of dermatoses including psoriasis, eczema, urticaria and vitiligo has demonstrated home phototherapy within an NHS service to have similar outcomes to hospital based therapy.⁵

The Dermatology GIRFT Programme National Speciality Report published in August 2021 highlighted that phototherapy is safer and less expensive than traditional systemic therapies and biologics. Reduced access to phototherapy increases the use of systemics and biologics.⁶ The recommendation was to improve patient access to phototherapy. The updated British Association of Dermatologists and British Photodermatology Group guidelines for narrowband ultraviolet B phototherapy from 2022 also emphasise that strategies are required to improve patient access.⁷

Despite this, the uptake of home phototherapy in the UK has been very poor, with only 2 centres offering a National Health Service (NHS) home phototherapy service. This is in contrast to other European countries, such as the Netherlands, where home phototherapy is widely available. There is significant evidence supporting its safety and effectiveness. Experience of setting up a new service has been reported.⁸

Current services report that careful selection of the patients is necessary to ensure compliance. Clear treatment protocols are required. Individual training and remote close monitoring from the clinical team is necessary. Clear governance arrangements are necessary aligned with a hospital-based phototherapy service adhering to the Phototherapy Minimum Standards.⁹ The home phototherapy team should include a Consultant Dermatologists, a phototherapy nurse practitioner and a medical physics practitioner.

Recommendations

- All phototherapy units in the UK should consider providing a home phototherapy service. It is important that home phototherapy should, in the UK NHS, be complementary to, not instead of, hospital-based phototherapy as it is not suitable for everyone.

- Careful patient selection and training followed by remote but close monitoring by experienced phototherapy nurses, supported by the base hospital phototherapy service is necessary for good outcomes and patient safety.
- Medical physics support is required to evaluate, safety check and carry out irradiance measurements at regular intervals suitable for the frequency of use of the home units.
- We **strongly recommend people do not purchase their own units** from manufacturers as medical supervision and medical physics support to safety check and carry out irradiance measurements are essential for the safe use of home units.
- Robust governance arrangements, linked to those of the hospital based service are necessary along with regular audit, including outcome and erythema rates, following the recommendations of British Association of Dermatologists Guidance and Standards for Phototherapy Units.⁹

References

1. Foerster J, Boswell K, West J et al. Narrowband UVB treatment is highly effective and causes a strong reduction in the use of steroid and other creams in psoriasis patients in clinical practice. PLoS One 2017; 12: e0181813.
2. Boswell K, Cameron H, West J et al. Narrowband ultraviolet B treatment for psoriasis is highly economical and causes significant savings in cost for topical treatments. Br J Dermatol 2018; 179: 1148-56
3. Larkö O, Swanbeck G. Home solarium treatment of psoriasis. Br J Dermatol 1979; 101: 13-6
4. Koek MB, Buskens E, van Weelden H et al. Home versus outpatient ultraviolet B phototherapy for mild to severe psoriasis: pragmatic multicentre randomised controlled noninferiority trial (PLUTO study). BMJ 2009; 338: b1542.
5. Cameron H, Yule S, Dawe RS et al. Review of an established UK home phototherapy service 1998-2011: improving access to a cost-effective treatment for chronic skin disease. Public Health 2014; 128: 317-24.
6. Levell P. Dermatology GRIFT Programme National Specialty Report. Aug 2021.
7. Goulden V, Ling TC, Babakininejad P et al. British Association of Dermatologists and British Photodermatology Group guidelines for narrowband ultraviolet B phototherapy 2022. British Journal of Dermatology (2022); 187:295–308
8. Warburton KL, Ward A, Turner D et al. Home phototherapy: experience of setting up a new service in the U.K.'s National Health Service. Br J Dermatol 2020; 182: 251-3.
9. Service Guidance and Standards for the Use of Phototherapy. British Association of Dermatologists. September 2024.