Establishing the use of total body photography among UK dermatologists

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DOI:
10.1111/ced.14882

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Establishing the use of total body photography among U.K. dermatologists

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Funding sources: Jac Dinnes is supported by the NIHR Birmingham Biomedical Research Centre. This paper presents independent research supported by the NIHR Birmingham Biomedical Research Centre at the University Hospitals Birmingham NHS Foundation Trust and the University of Birmingham. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

Conflicts of interest: None to declare.

Ethical approval: Exempt.

Word count: 499

Figure count: 2

References: 5

Total body photography (TBP) is increasingly used to monitor skin lesions in individuals at high risk of melanoma. Two surveys of U.S. dermatologists demonstrated variable reasons for use and conflicting beliefs regarding TBP efficacy.[1,2] Although TBP may reduce number-needed-to-biopsy when diagnosing melanoma, there is scarce evidence for TBP use in lower-risk populations and a lack of consensus on optimal TBP use.[3] Thus, we undertook the first U.K. survey to assess TBP rationale, target populations, and protocols.

A questionnaire was distributed via the British Association of Dermatologists Newsletter in December 2020 (Supplemental Methods): 107 responses (9% response rate) were received from 62 National Health Service Trusts representing all UK regions. Respondents were most commonly 41-60 years old, 51% were male, 83% were consultants and 12% specialist registrars.

Nearly 65% (69/107) respondents reported using TBP (Figure 1). Approximately 54% (37/69) of respondents conducted TBP within a high-risk melanoma surveillance clinic. Median number of photographs/patient was 12. Most protocols included face (68%, 47/69); fewer included palms (42%, 29/69) and soles (29%, 20/69). Most protocols (94%, 65/69) included close-up images, and 86% (59/69) included dermoscopic images. Respondents used TBP to compare either only clinically suspicious naevi (45%, 31/69) or every naevus (33%, 23/69) to a previous TBP image set. Only 3% (2/69) of protocols used artificial intelligence (AI), but 68% (47/69) respondents believed AI could facilitate future TBP use.

Overall, 49% (34/69) respondents provided all patients with their TBP images and 42% (29/69) provided to patients who requested it. While 38% (26/69) reported patients using smartphone apps to monitor lesions (including MySkinSelfie and Miiskin), 19% (13/69) recommended patients use apps to monitor skin lesions. Thirty-six per cent (38/69) did not use TBP (Figure 2). TBP use was not associated with age, gender or grade.

Reasons cited for TBP use were consistent with published studies, including detection of thinner melanomas and reduced number-needed-to-biopsy.[3] Target populations were mostly patients at high risk of melanoma. Only 7% of respondents using TBP in lower-risk patients.

To our knowledge, this is the first evaluation of TBP use among U.K. dermatologists, illustrating variability in reasons for use, target populations, and protocols. Despite reports that TBP can reduce number of biopsies and patient anxiety in specific groups[3,4], around 10% clinicians reported not using TBP due to beliefs that it leads to more biopsies or patient anxiety. Logistical constraints and lack of training were cited as barriers to uptake and could be addressed nationally.

Nearly 40% of respondents reported patients using smartphone apps to monitor skin lesions in addition to TBP and 1/5 clinicians recommended apps for monitoring naevi, despite evidence suggesting that current apps using AI to identify suspicious lesions have poor accuracy.[5]

Limitations of our study include convenience sampling and a significant risk of non-response bias due to low response rate which may have led to overestimation of TBP utilization. Nevertheless, these data will help to inform the design of prospective studies of TBP in melanoma diagnosis.

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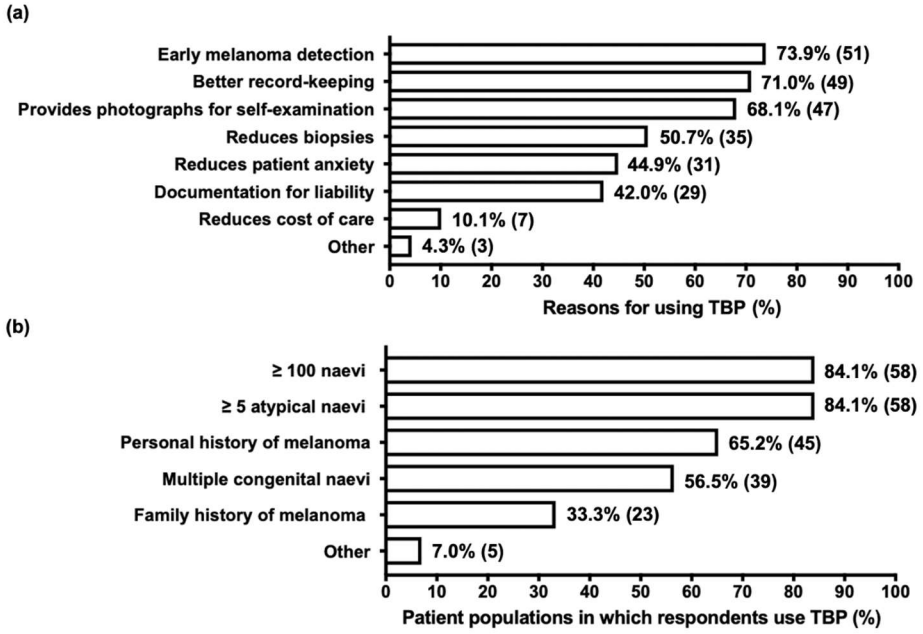

Figure 1. (a) Reasons for and (b) targets populations in which total body photography is used among U.K. dermatologists. Data shown as % (n). TBP, total body photography.

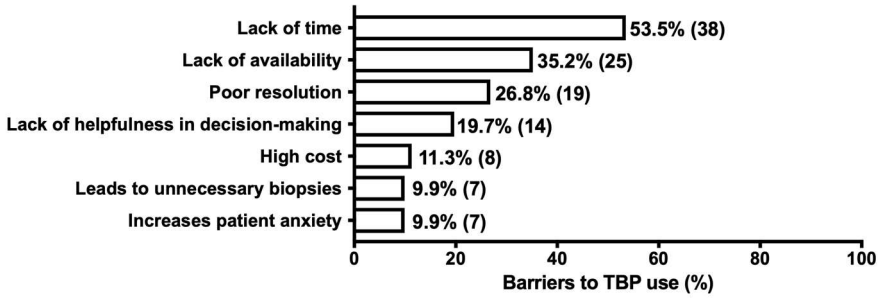

Figure 2. Barriers preventing the use of total body photography among U.K. dermatologists. Data shown as % (n). TBP, total body photography.