Clinics in Surgery

Clinical Image
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The Use of Smartphone Photography in Patients with Multiple Skin Lesions

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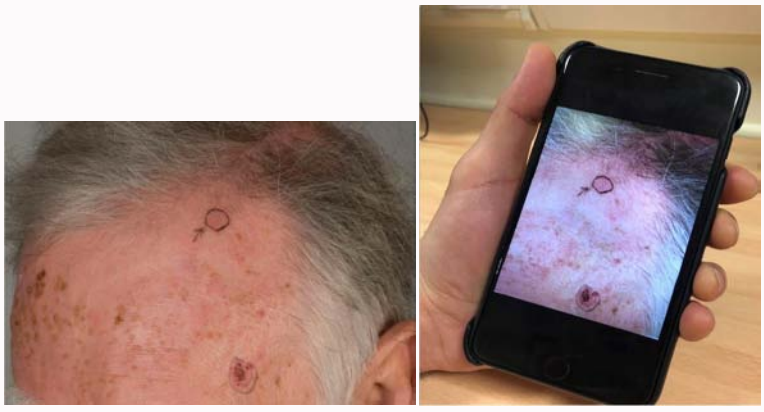
Clinical Image

Smartphone photography is one of the most innovative methods used nowadays as an information tool [1]. However, its use in the clinical setting is restricted because of issues with data protection and information governance. Patients with multiple skin lesions represent a challenge to surgeons involved with skin surgery. This is particularly evident when listing patients for surgical excision. Standard practice relies on hospital medical photography on the day of the outpatient visit to accurately identify and record the targeted lesions. However, this is not always readily available. Therefore, we utilised the patient's own Smartphone as an easy, economic and an effective way for identifying these lesions on the day of surgery.

A patient with multiple skin lesions requiring surgical excision will normally present to outpatient clinics where the diagnosis is made. A photograph of the relevant lesion(s) suitably marked is taken using the patient's own Smartphone camera (Figure 1). Included on the photograph are topographical landmarks to facilitate later identification. On the day of surgery the patient shows the surgeon/dermatologist the saved photographs on the Smartphone (Figure 1). This aids quick identification of lesions for surgical removal. This is particularly useful in the presence of multiple similar lesions on anatomical sites not readily visible to the patient such as the scalp and the back.

The current literature only describes the use of Smartphone photography for detecting, examining or even monitoring skin lesions, which are single, and remote [1,2]. Multiple skin lesions are challenging and sometimes confusing for the surgeon especially when the same area demonstrates a number of skin lesions (Figure 1). With the above technique, Smartphone photography facilitates the consent process and avoids delay [3,4]. Employing the patient's own Smartphone to provide an accurate record of lesions requiring surgery aids in maintaining confidentiality and circumvents the need for or delay in obtaining access to medical illustration database, which may in any case not be readily available. Removing the wrong lesion is a significant risk when there are multiple similar lesions in the surrounding area such as the actinic scalp.



1a: 1b:

Figure 1: (a) Multiple skin lesions on the patient's scalp. They are identical and difficult for the surgeon/dermatologist to recognise which to excise. The targeted lesion for excision is marked. **(b)** The skin lesion is photographed using patient's Smartphone camera. In the photograph, topographical landmarks are clear facilitating the identification.

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This is also relevant when a patient is referred for the definitive excision following an incisional biopsy by the dermatologist as often the original biopsy site may not be clearly visible. The ready availability of a photographic record of the marked lesion is most helpful to the surgeon on the day and contributes to reducing risk.

References

1. Ashique KT, Kaliyadan F, Aurangabadkar SJ. Clinical photography in dermatology using smartphones: An overview. Indian Dermatol Online J. 2015;6(3):158-63.
2. McWinter JE, Hoffman-Goetz L. Visual images for patient skin self-examination and melanoma detection: A systematic review of published studies. J Am Acad Dermatol. 2013;69(1):47-55.
3. Asaid R, Boyce G, Padmasekara G. Use of a Smartphone for monitoring dermatological lesions compared to clinical photography. JMTM. 2012;1:16-8.
4. Harting MT, DeWees JM, Vela KM, Khirallah RT. Medical photography: current technology, evolving issues and legal perspectives. Int J Clin Pract. 2015;69(4):401-9.