Transparent grid system as a novel tool to prevent wrong-site skin surgery on the back



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SURGICAL CHALLENGE

Wrong-site skin surgery continues to exist as a complication despite various techniques that have been developed by clinicians around the world. Many factors contribute to the difficulty in biopsy site identification. These include a delay between the biopsy and the surgical excision, inadequate photography or written documentation, and an inability for the patient to see his or her own biopsy site. The back is an area of the body that has poor landmarks and is not visible to the patient. A well-healed scar among multiple skin lesions, moles, and other scars increases the risk of wrong-site surgery in this area.

THE SOLUTION

At the time of biopsy, a transparent grid system can be used to locate skin lesions on the back. Use of a transparent grid to identify facial lesions was recently described by Wernham and Varma. An A3 transparent grid (Fig 1) is placed on the upper or lower back, and the coordinates of the lesion for biopsy are documented to assist with follow-up. Uniform positioning of the grid is achieved by seating the patient and using the C7 spinous process landmark for the upper back and the inferior angle of both scapulae for the lower back. Photos can be taken of the marked lesion on the patient's back and then again with the transparent grid on the patient (Fig 2). This technique offers a new solution to locating a lesion or biopsy site on the back, where typically there are few landmarks and a higher risk of misidentification.

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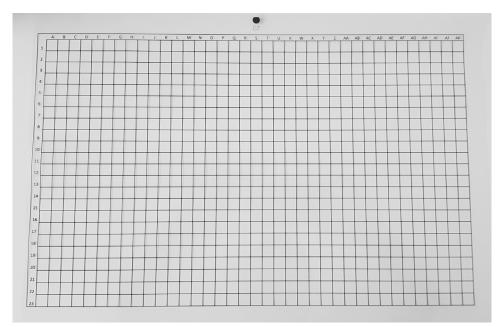


Fig 1. A transparent A3 grid is created on an Excel spreadsheet (Microsoft, Redmond, WA) and printed onto acetate transparent film. The grid has been designed to mark out 1-cm^2 boxes and is labeled with letters on the *x*-axis and numbers on the *y*-axis to assist with identification of lesions. The C7 dot at the top assists with placement of the grid on the upper back on the pronounced C7 spinous process.

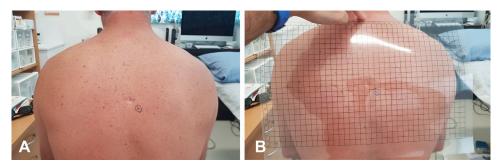


Fig 2. A, Patient presents with numerous moles, scars, and indurations on the back. The lesion of interest has been marked and a photograph taken in the clinic. **B**, The A3 grid has been placed on the upper back using C7 as a point of reference for orientation. The lesion of interest in this picture is seen at the U14 position. This position can be documented in the clinical notes for identification on the surgical excision date. Alternatively, if referring the patient onward, the grid can be drawn on with a marker pen and given to the patient.

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