

Disposable gloves as an educational tool in teaching hand anatomy

Sir,

Disposable gloves are indispensable during operative procedures to maintain antisepsis. Since William S. Halstead's pioneering use of surgical gloves as a protective tool for a surgeon in 1896, numerous innovative uses of gloves have been documented, often in hand trauma.^[1-3] Their uses relating to educational purposes have, however, been poorly documented.

We would like to propose an innovative use of disposable gloves in hand anatomy teaching. Hand anatomy can be particularly intricate and can often prove to be challenging for young medical students, junior doctors and surgical trainees.

A powder-free latex glove of suitable size is chosen by a tutor to ensure a comfortable fit for the trainee's hand. Basic outlines of bones, muscle and tendon attachments, blood vessels and nerves can then be subsequently drawn on with a pen, thereby providing the trainee with a useful visual aid [Figures 1-3]. This model is particularly good for demonstrating incisions for surgical exposures for acute and elective procedures. Local flaps can be drawn and raised using double gloves of two different colours. Furthermore, this model can also be used to facilitate the understanding of hand injuries and their treatment to patients as well as hand therapists.

This educational tool is extremely versatile, and the inclusion of intricate anatomical details can be tailored to the trainee's current level of training or above. It is a cheap learning resource, can be used in numerous settings and includes materials readily available in all clinical environments around the hospital. Moreover, this technique ensures dynamic learning of anatomy as movements of muscles and tendons are displayed after the glove is fitted and trainees are more likely to understand tendon attachments and muscle actions.

We find this method quick, easy, cheap and efficient in teaching trainees about hand anatomy while appreciating the dynamic advantage of this technique and simply using basic material already at the clinician's disposal.



Figure 1: Surgical glove model -Dorsal bony outline



Figure 2: Dorsal bony and soft tissue outline



Figure 3: Volar bony and soft tissue outline

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Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. Tang SW, Bebbington A. Fingerless gloves for hand trauma cases. *Ann R Coll Surg Engl* 2011;93:175.
2. Guirguis EM, Bell MS. The wrist tourniquet: An alternative technique in hand surgery. *J Hand Surg Am* 1990;15:516-9.
3. Hou SM, Urbaniak JR. Use of the surgical glove in microsurgery. *J Reconstr Microsurg* 1987;4:45-8.

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