

Infection prevention auditing in podiatry: collaboration at the national level to ensure safe use of automated scalpel blade removers

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Introduction:

Automated scalpel blade removers (SBRs) are engineered to reduce risk of healthcare worker injury and potential transmission of infection. They are used to detach scalpel blades from handles prior to reprocessing. We report the outcome following review of SBR use in a podiatry clinic within a large metropolitan health service.

Method:

In 2017, an annual infection prevention (IP) environmental audit of the podiatry service was conducted using standardised criteria aligned with the *Safety and Quality Improvement Guide Standard 3: Preventing and Controlling Healthcare Associated Infections*.¹

Results:

It was revealed that scalpel handles were re-used after blade removal in the SBRs (if blades become blunt, or if moving from one procedural site to another). Employing adult learning principles, simulation using UV light and fluorescent solution illustrated the potential for SBRs to contribute to cross-contamination (Figs. 1 – 4) which initiated a series of actions (Fig 5.)



Fig 1. Contaminated blade and handle inserted into SBR



Fig 2. Contaminated interior and aperture after removal

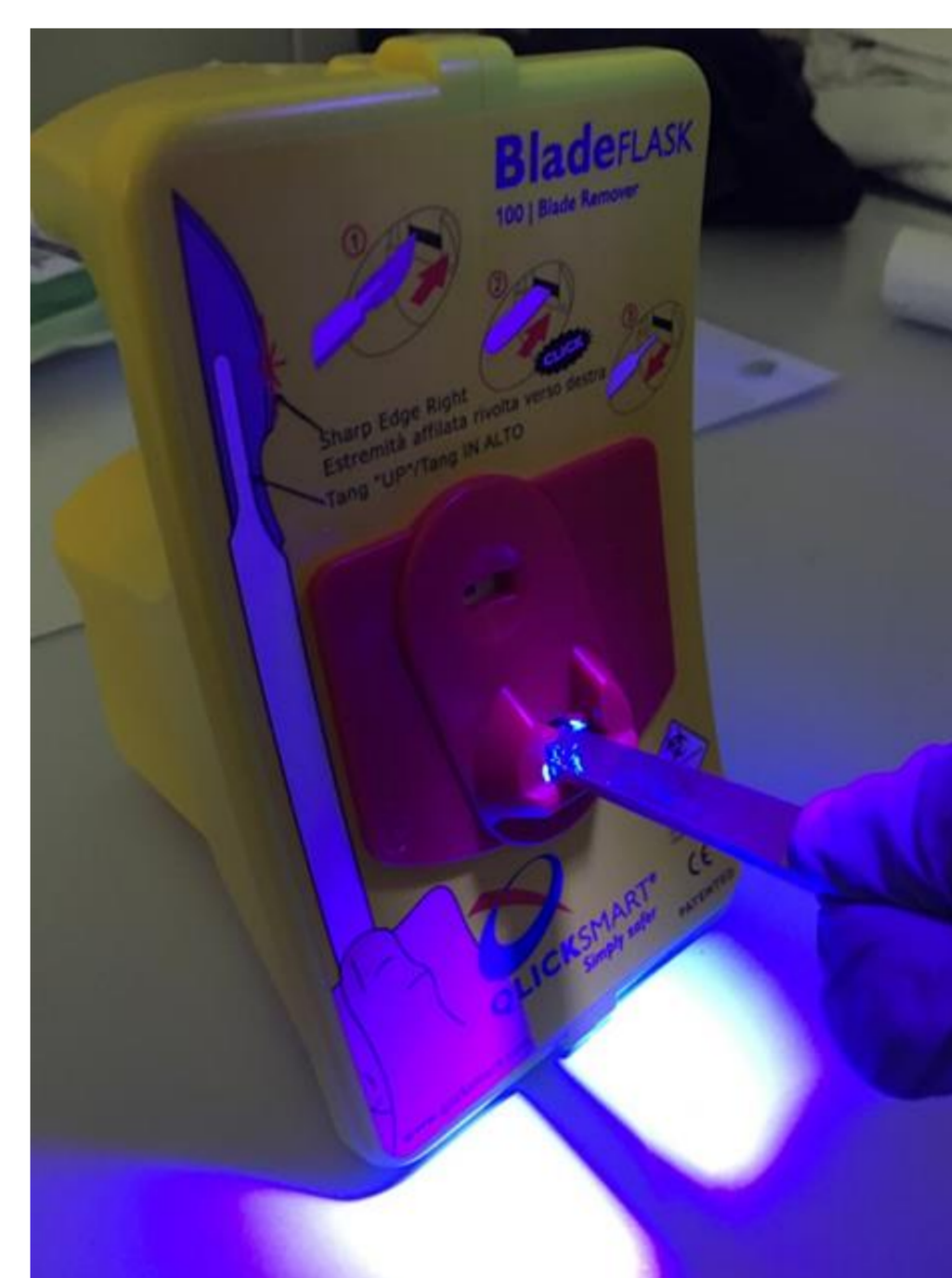


Fig 3. New blade and handle inserted to remove blade

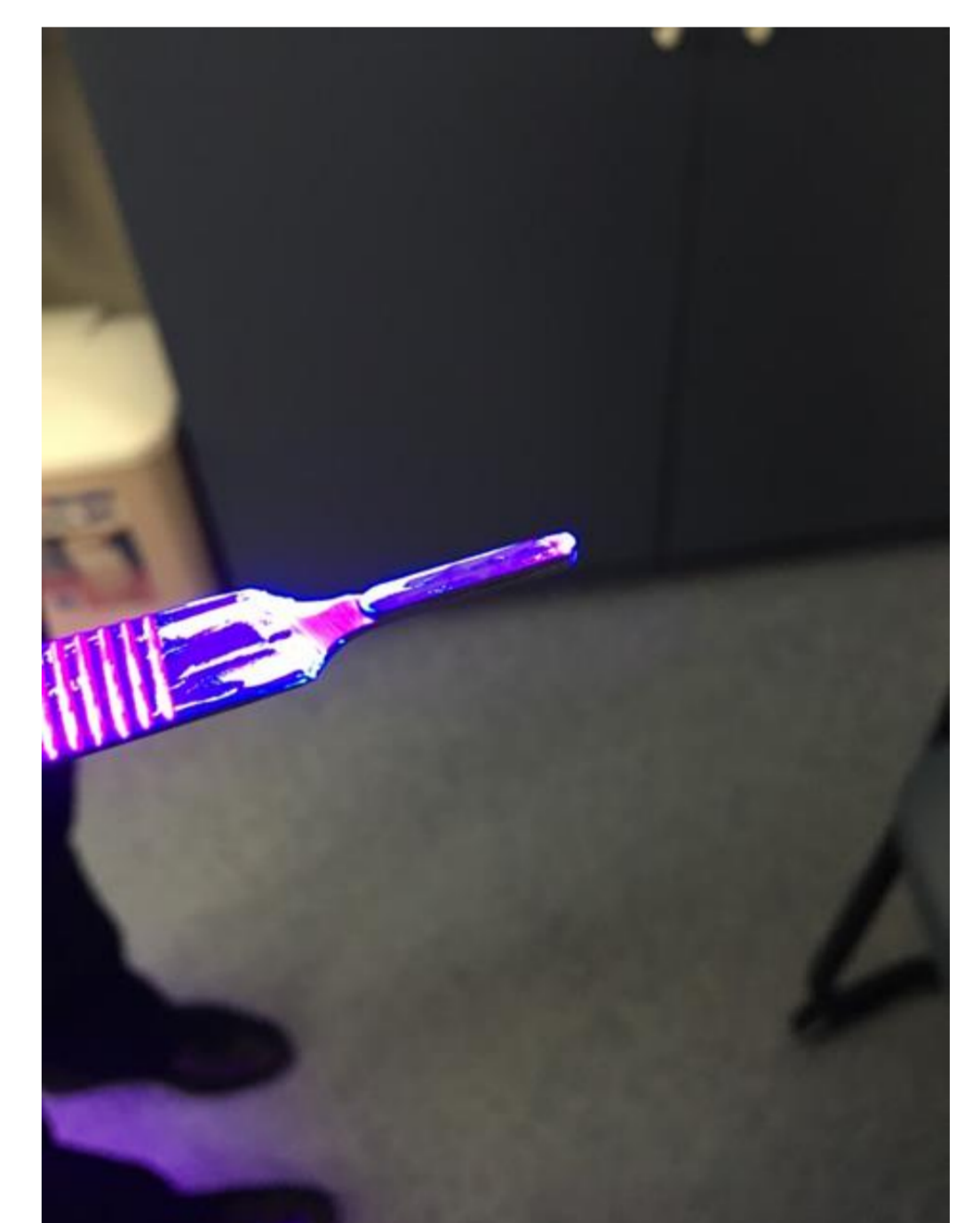


Fig 4. Handle contaminated after removal from SBR



Fig 5. Responses to audit findings

Discussion:

This finding and subsequent collaboration highlights a number of key points for consideration:

Importance of working relationships	Clinician understanding of IP principles	Sensitivity and specificity of IP auditing	What can the IP community do?
<ul style="list-style-type: none"> • Allows better understanding of work patterns • Led to immediate actions 	<ul style="list-style-type: none"> • Aseptic technique • Hand hygiene • Single-use items • Sharps injury prevention • Clinician training • Clinical supervision 	<ul style="list-style-type: none"> • Ensuring changes to standards considered when performing auditing • Ensuring IP audit validity 	<ul style="list-style-type: none"> • Should a healthcare worker training guide for IP be proposed? • Who is best equipped to teach undergraduate clinicians in IP? • What exists to standardise IP support for clinicians working in the community?

Conclusions:

Our findings identified a knowledge gap and enabled targeted intervention and education of staff to reduce risk. Valid, periodic auditing of systems and practices in specialised clinical units, together with engagement of clinicians is of benefit, and can contribute to embedding the national strategy.

1. Australian Commission on Safety and Quality in Health Care (ACSQHC). National safety and quality health service standards [Internet]. Sydney: ACSQHC; 2012 Sep [cited 2018 Jun 11]. 80 p. Available from: <https://www.safetyandquality.gov.au/wp-content/uploads/2011/09/NSQHS-Standards-Sept-2012.pdf>