

"SCALPEL SAFETY" is the Burning Issue

What are surgeons really looking for?

Dr. Michael Sinnott

A "single handed scalpel blade remover", when combined with a hands free passing technique (such as a passing tray) is as safe and up to FIVE times safer than a safety scalpel. Just as importantly it is guaranteed to keep your surgeons happy as they can continue to use their superior reusable balanced metal handles.

Despite a reasonably good conversion rate to safety syringes in the United States, the conversion to safety scalpels has been very slow. In fact it has been actively resisted by most surgeons¹.

Why is this the case? Not surprisingly, the answer is multifactorial.

The best product must address not one but two issues. Firstly it must provide real safety to ALL staff at risk – including the 10% of "downstream" healthcare workers injured by sharps injuries. Secondly, and just as importantly, the product must be used. If a safety device is not used or not used properly, it is just a waste of money.

A recent study by Fuentes et. al. looked at all scalpel injuries reported by staff in a 700 bed tertiary referral hospital over a 15 year period from 1987 to 2003. They studied 137 of the 141 injuries reported and found that just over 50% were preventable - injuries occurring when the scalpel blade was being loaded (3), during passing (24), during removal (18), during disposal (14), during cleaning (7) and to downstream workers (6). The remaining

65 injuries occurred during use and were considered not to be preventable².

Next Fuentes and colleagues looked at two theoretical strategies to prevent these injuries – combining a single-handed scalpel blade remover with a passing tray vs. a safety scalpel. On initial analysis the two processes were found to be comparable, with the safety scalpel potentially preventing three more injuries, namely when the scalpel was being loaded.

However on reviewing the classic study commissioned by the CDC and published by Alvarado-Ramy et. al.³ and an article by Stringer on hands free passing techniques⁴. Fuentes revised his

calculations taking into account that the activation rates for "Active" devices like the safety scalpel ranged from as little as 17% to 90%. On the basis of this, the number of potential injuries prevented by a safety scalpel was as low as 12 out of 137. (NB "Passive" safety devices are automatic, whereas the inferior "automatic" safety devices must be activated manually.)

Firstly, the "blame game" has to stop. I have been surprised by how often I have heard comments like "How bad US surgeons were for not adopting the plastic safety scalpels". (Incidentally Australian surgeons say using the plastic handles is like eating your dinner with a plastic knife and fork.) A study by Tseng et al confirmed that both doctors and

nurses put their patients' safety before their own⁵.

I believe that the future relies on us to create and promote a "culture of staff safety" as this is a prerequisite to a culture of patient safety! The two must not be seen to be mutually exclusive.

Research shows that a single handed scalpel blade remover combined with a passing tray is at least as safe as and up to FIVE times safer than a safety scalpel. This method is acceptable to OSHA. Early feedback also strongly indicates that compliance by surgeons will be much higher as it allows them to continue to use their preferred reusable balanced metal handles that ensure their patients receive the best outcome possible.

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You can read more about how this exciting new invention was prompted by a clinical nurse – www.qlicksmart.com



References:

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A single handed scalpel blade remover lets surgeons continue to use their reusable balanced metal handles.