

## **Our aim was to describe the MRSA contamination rate of phlebotomy tourniquets and faucets in a tertiary care hospital and to compare the contamination of plastic tourniquets with that of fabric tourniquets” Abeywickrama et al (2018).**

### Abstract:

**INTRODUCTION:** Methicillin resistant *Staphylococcus aureus* (MRSA) is transmitted through direct contact or fomites. The most important means of nosocomial spread is by hospital personnel. However, fomites are being increasingly recognized as sources of nosocomial infection.

**OBJECTIVES:** Our aim was to describe the MRSA contamination rate of phlebotomy tourniquets and faucets in a tertiary care hospital and to compare the contamination of plastic tourniquets with that of fabric tourniquets.

**METHOD:** A cross-sectional study was carried out in the general wards of a tertiary care hospital in the Colombo District. Two hundred tourniquets were collected and 100 faucets were swabbed and cultured on CHROMagar™ MRSA medium (CHROMagar Microbiology). Contamination rates of 50 plastic tourniquets and 50 fabric tourniquets were compared.

**RESULTS:** MRSA grew in 26% of tourniquets. Majority were plastic tubes. MRSA contamination of tourniquets did not significantly differ by ward ( $p>0.4$ ). MRSA was found on 26% of faucets. Contamination rate was highest in the common wards for dermatology, dental, rheumatology, and neurology (55.6%), followed by gynaecology (45.2%), cardiology (33.3%), surgery (18.8%), psychiatry (11.1%), and medicine (5.6%). There was a significant difference in rates of contamination of faucets in the different wards ( $p<0.01$ ). There was no significant difference in the colony count per surface area of the two types of tourniquets after a single use.

**CONCLUSIONS:** MRSA contamination rates of tourniquets and faucets were high. Single-use plastic tourniquets were much less contaminated with MRSA than reused tourniquets.

Full Text



Reference:

Abeywickrama, T., Amarasinghe, K., Wijerathne, S., Dharmaratne, C., Fernando, D., Senaratna, B.C. and Gunasekera, H.A.K.M. (2018) Methicillin resistant Staphylococcus aureus contamination of phlebotomy tourniquets and faucets. The Ceylon Medical Journal. 63(1), p.5-10.

DOI: 10.4038/cmj.v63i1.8627