

10.53106/199457952023091705009

Risk Assessment and Infection Control for Reuse of Single-Use Medical Devices

Su-Chiu Hsiao^{1*}

¹Nursing Department, Chi Mei Medical Center, Liouying

*Corresponding Author: Su-Chiu Hsiao

Email: n790115@mail.chimei.org.tw

ORCID:  <http://orcid.org/0009-0002-0714-638X>

Abstract

The reuse of single-use medical devices has gained increasing attention in the healthcare environment. Although Taiwan has conditionally deregulated the reuse of such devices, which may entail a certain level of infection risk, establishing standardized processes, enhancing training, and establishing tracking systems can effectively mitigate the risk. This study aimed to assess the risk associated with reusing single-use medical devices and explore corresponding infection control measures.

Firstly, healthcare institutions should define clear reprocessing protocols and comprehensively evaluate the adherence to standard procedures at every step, including cleaning, sterilization, and post-sterilization verification. Subsequently, healthcare institutions should establish a robust medical device tracking system to trace the usage and processing of each device, thereby facilitating rapid source identification in the event of infection incidents.

Lastly, device selection plays a crucial role in reducing infection risk. Healthcare institutions should prioritize choosing devices suitable for reprocessing and evaluate their material and structural compatibility with the reprocessing procedures.

Moreover, regulatory authorities should strengthen supervision over the reprocessing of single-use medical devices to ensure that healthcare institutions adhere to relevant standards and guidelines. Doing so contributes to creating a safer healthcare environment and safeguarding patients' health.

Keywords: single-use medical device, reprocessing, risk assessment, infection control


單次醫材重處理使用之風險評估與感染管制

蕭素秋^{1*}

¹奇美醫療財團法人柳營奇美醫院護理部

*通訊作者：蕭素秋

電子信箱：n790115@mail.chimei.org.tw

ORCID:  <http://orcid.org/0009-0002-0714-638X>

所屬單位：奇美醫療財團法人柳營奇美醫院護理部

聯絡地址：臺南市柳營區太康里太康201號

摘要

單次醫材的重處理使用在醫療環境中日益受到關注，雖然國內法規有條件鬆綁，確實存在一定的感染風險，但通過制定標準流程、加強培訓和建立追蹤系統等措施，可有效降低風險，本文旨在評估單次醫材重處理的風險並探討相應的感染管制措施。首先醫療機構應明定重處理流程標準，全面評估確保每個環節皆符合標準程序，包括清潔、滅菌及滅菌後驗證等，再者，建立完善的醫材追蹤系統，追溯每個醫材使用和處理過程，以利發生感染事件時能快速定位源頭。最後，醫材的選擇也是降低感染風險的重要因素，醫療機構應優先選擇適合重處理的醫材，並評估其材質和結構特性是否適合？此外，監管機構應加強對單次醫材重處理的監督，確保醫療機構遵守相關的標準和指南，這將有助於提供更安全的醫療環境，保護病人的健康。

關鍵詞：單次醫材、重處理、風險評估、感染管制