

Clinical Study Analysis

The effectiveness of the UV Smart D60 in reducing contamination of flexible fiberoptic laryngoscopes.



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Study Keywords

- Microbial burden
- Pre-cleaning
- Contamination
- UV-C vs Cidex

What is the study about?

The study compares the disinfection efficacy of the UV Smart D60 UV-C device to the chemical soaking disinfection with Cidex OPA. Both methods were tested on 200 Flexible Laryngoscopes after normal clinical usage.

Three pre-cleaning methods were tested for the D60 UV-C disinfection (see below).

Key takeaways

Disinfection: Significant reduction in microbial burden was achieved with both methods. No significant difference was found between Cidex OPA and UV Smart D60, both methods are equivalent

Efficiency: UV Smart D60 offers quicker disinfection times (1.5–2 minutes) compared to the standard method (13.5 minutes).

Results

Pre-cleaning + Disinfection	Enzymatic detergent + Cidex OPA	Enzymatic detergent + UV D60	Microfiber cloth & water + UV D60	Non sterile wipe & water + UV D60
Same high-level disinfection effectiveness				Not sufficient

Points of misinterpretation	Response
Contamination was found in some of the samples, especially when using the non-sterile wipe as a pre-cleaning method.	No high concern microorganisms were found. The organisms found on the device are commonly present in the environment and on skin. The author attributed the presence of this contamination to minor errors in handling the samples during testing.
Higher contamination rates with UV-C compared to standard Cidex OPA disinfection.	The difference in contamination between conditions is not statistically significant. The author concludes that the four methods are equally effective.

[Click here to read the full study](#)