

Use of Opti-Jet Cs Md1mr Device for Biocide Aerosolisation in 3t Magnetic Resonance

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Abstract : Introduction: This work is aimed to represent the use of the OPTI-JET CS MD1 MR prototype for application of neutral electrolyzed oxidizing water (NEOW) in magnetic resonance rooms. Material and Methods: We produced and used OPTI-JET CS MD1 MR aerosoliser whereby was performed aerosolization. The presence of microorganisms before and after the aerosolisation was recorded with the help of cyclone air sampling. Colony formed units (CFU) was counted. Results: The number of microorganisms in magnetic resonance 3T room was low as expected. Nevertheless, a possible CFU reduction of 87% was recorded. Conclusions: The research has shown that the use of EOW for the air and hard surface disinfection can considerably reduce the presence of microorganisms and consequently the possibility of hospital infections. It has also demonstrated that the use of OPTI-JET CS MD1 MR is very good. With this research, we started new guidelines for aerosolization in magnetic resonance rooms. Future work: We predict that presented technique works very good but we must focus also on time capacity sensors, and new appropriate toxicological studies.

Keywords : biocide, electrolyzed oxidizing water (EOW), disinfection, microorganisms, OPTI-JET CS MD1MR

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