

**PPJ001: Poster presentation**

**An Improved evaluation method of protection performance of  
medical face mask against penetration by liquid splash**

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**Abstract**

In the case of serious infectious surgery field, medical face mask needs not only the respiratory protection performance but also the protection performance against the penetration of infectious liquid splash at the same time.

As one of the protection performance test of the medical face mask, ISO 22609 test method were established, but the judgment of acceptance on this test is carried out only visually.

Therefore, in this study, we modified this test method and tried quantification of the leaked liquid volume. We tested some nonwoven or woven materials used for masks or protective clothing, and we evaluated the usefulness of this modified test method.

As a result, the quantity of leaked liquid greatly depended on each material character, and it was confirmed that the leakage quantity showed equilateral correlation to emitting pressure of the splash gun. Our improved method can be useful for evaluation or selection of mask materials because protection performance against penetration by liquid splash can be analyzed in detail by this method.

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