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Device for quick, effective treatment of common hearing disorder

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A team of researchers from the National University of Singapore (NUS) has developed a novel handheld device, known as CLiKX, for the treatment of a condition called Otitis Media with Effusion (OME), or 'glue ear', which is the leading cause of hearing loss and visits to the doctors among children worldwide. This NUS invention, which is sensor-guided and easy to use, could significantly improve current surgical treatment of the condition.

For patients with three or more episodes of OME within a year, grommet tube placement surgery is currently the gold standard of care. A grommet is a very small tube that is inserted onto the patient's ear drum during surgery to help drain away fluid in the middle ear. Each procedure usually takes about 30 minutes under general anaesthesia to complete.

Grommet tube placement surgery is carried out in an operating theatre with the use of general anaesthetic, which is a major point of concern for parents who worry about its potential negative impact on brain development in young children.

CLiKX can potentially shift the current standard surgical procedures for OME. With this pistol-like applicator, the grommet tube can be easily inserted into a patient's ear within a single click. In less than a second, the procedure is done.

The NUS team aims to conduct the first-in-man trial in Singapore in 2018. The team is keen to work with partners to further develop and commercialise the device, and they aim to launch the device in the market by 2020.