

## Short Note A Magnetic Choke-Saver Might Relieve Choking

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When a person is choking on a piece of food and there is acute obstruction of the airway so that s(he) cannot breathe, the Heimlich maneuver or procedure can be effective in relieving the emergency (1). However, if someone were choking while dining alone or not in the company of anyone adequately skillful in the application of this maneuver, the problem might be solvable by means of a slight modification of a magnetic device (2) which is currently used in neurology, pneumonology and urology. It is used in these three fields, respectively, to assess disorder of the motor system, to measure diaphragmatic strength and to assess bladder and pelvic floor function. The device is a magnetic nerve stimulator which can stimulate deep or otherwise inaccessible nerves painlessly, contactlessly and without any need for removal of clothing. The stimulating coil is merely held in place either next to or a few millimeters away from the area of the body to be stimulated. With as little as perhaps 20% more power than that provided by currently available models, the stimulating coil could relieve choking by stunning the neuromuscular apparatus of the pharynx or larynx in such a way that it would momentarily relax and thereby release the food bolus and allow it to become reoriented so as to either be ejected, pass on down through the esophagus to the stomach or, in the worst case, down through the trachea into the lungs, in which case it would subsequently have to be removed in a clinical setting, perhaps by a nonsurgical,

noninvasive technique involving suction. In any case, the emergency of being in danger of choking to death would be relieved as a result of application of the coil to the neck area. One way of demonstrating that the suggested method would be effective would be to test it on animals with obstructed airways whose temporal lobes were being pleasurablely stimulated with ultrasound, as described in another paper (3), through the intact skull and scalp, so they would experience none of the distress or pain a human feels when s(he) accidentally chokes.

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