Neonatal pneumothorax decompression device

A rapidly deployable, self-contained device to evacuate air from the pleural space of a neonate.

IP Status: Provisional Patent Application Filed

Applications

• Evacuate air from the pleural space of a neonate

Technology Overview

The decompression of a tension pneumothorax in neonates is an emergent, life-saving procedure. Researchers at the University of Minnesota have developed a novel device to treat pneumothorax in neonates. The device is composed of a fluid pump, pressure indicator, and needle stabilizer. Once the needle has entered the pleural space, the pressure indicator spins and the aspirated air exits through a one-way valve. This self-contained device can be rapidly deployed and used by a single healthcare provider, which accelerates the restoration of heart and lung function.

Phase of Development

TRL: 2-3

Prototype designed and initial clinician feedback gathered.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

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Researchers

- Jonathan Strutt, MD Assistant Professor, Department of Pediatrics
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Technology ID

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Category

Life Sciences/Medical Devices

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