A positive pressure nasogastric pump

THE EXISTING PROBLEM OR ISSUE

Nasogastric intubation is a traumatic and often painful experience for patients who need to have their stomach contents drained or their bowel rested. It can last for days or weeks in some cases with the rigid plastic tube irritating and ulcerating the back of the nose and throat – it is miserable, limits mobility and is enormously distressing.

The main problem is that the tube must be stiff enough to sustain the vacuum needed to draw the stomach juices up the gullet. Additionally, the patient must be close to a vacuum source so mobility is limited.

OUR SOLUTION

We propose a soft tube, like a fire hose rather than a pipe, with a small pump actually inside the stomach. The fluid moves under positive pressure not negative pressure because of the small pneumatically driven pump. The tube is soft and floppy and not uncomfortable and the patient can move around.

This small pump, measuring at less than 4 × 20mm and shown below, consists of an inflatable bladder and valves. The bladder is inflated by compressed air delivered by a very small tube running inside the compliant extraction tube. Cycling the pressure supplied to the bladder results in sufficient pumping of viscous fluids.

INVENTORS

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INTELLECTUAL PROPERTY POSITION

Australian Patent Application:
Nasogastric Pump

WOULD YOU LIKE TO KNOW MORE?

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<td>Pump allows or the use of highly flexible tubing</td>
<td>Greater patient comfort</td>
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<td>Small pump size (4 × 20mm)</td>
<td>Allows pump to be inserted through nose and placed in the stomach</td>
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