

Probiotics 'may stop pneumonia'

Probiotics could be used to protect critically ill patients from developing pneumonia, according to scientists.

The friendly bacteria can block the colonisation by dangerous bugs of the airways of ventilated patients, the Swedish study concluded.

The probiotic solution performed just as well as normal antiseptics used to keep pneumonia-causing bacteria at bay, the journal *Critical Care* reported.

Being more natural it could pose fewer side effects, the authors said.

Friendly bugs

The probiotic bacterium *Lactobacillus plantarum* 299 is normally present in saliva and is also commonly found in fermented products like pickles and sauerkraut.

Although rare, some patients are allergic to the antiseptics normally used to prevent ventilator-associated pneumonia, namely chlorhexidine.

There is also a very small risk of the pneumonia-causing bacteria developing chlorhexidine resistance.

Pneumonia is a common complication in patients on breathing machines and occurs when harmful bacteria from the mouth, throat or breathing tube are inhaled into the lungs.

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Bob Marsterton of the British Society for Antimicrobial Chemotherapy

Swabbing the mouth with chlorhexidine is widely recommended to reduce the risk ventilator-associated pneumonia in critically ill patients requiring mechanical ventilation.

Bengt Klarin and colleagues at the University Hospital in Lund, Sweden, compared the probiotic treatment with chlorhexidine in 50 critically ill patients.

Microbiological testing revealed both treatments appeared to be equally effective at preventing potentially harmful bacteria from flourishing in the mouth and throat.

In addition, a probiotic that adheres to mouth lining will be able to work around the clock, unlike antiseptics which wear off after a few hours, say the authors.

The scientists said bigger studies were now needed to investigate the feasibility of using probiotics in this setting.

Bob Marsterton, chair of the British Society for Antimicrobial Chemotherapy's working party on hospital acquired pneumonia, said: "This is a plausible idea. But we need much larger trials that focus on clinical outcomes to prove it is an effective and affordable treatment."

He said chlorhexidine highly effective, affordable and readily available.

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