Oral healthcare for dysphagic stroke patients: time for a randomised trial – we are looking for expressions of interest (EOIs).

Post-stroke pneumonia (PSP) is the most common complication of stroke affecting 1 in 12 people hospitalised with a stroke [1]. Dysphagia is an important risk factor for PSP and occurs in around 45% of acute strokes [1]. Dysphagia and PSP are both associated with worse clinical outcomes. In those with PSP, in-hospital death or severe disability at discharge is 60% compared to 24% without PSP [2]. PSP is associated with increased acute care costs and there are few preventive strategies.

Poor oral health is linked to developing PSP due to aspiration of oral biofilm (dental plaque related to oral bacteria) [3]. Stroke survivors have a higher prevalence of poor oral health, including gingivitis, periodontal disease, dental plaque, xerostomia, tooth loss and use of dentures than people without a stroke [4]. Oral healthcare (OHC) is recognised by nurses as a fundamental aspect of nursing care. However, nursing staff report limited access to equipment and training, and it is consistently neglected. Nurses worry about causing harm (e.g. risk of aspiration) and additional training of nursing staff may improve OHC confidence and delivery.

Targeting poor oral health in acute dysphagic stroke patients may prevent PSP and improve clinical outcomes for patients. Prevention of PSP is also a top-10 research priority identified by the Stroke Association/James Lind Alliance. However, there is currently a lack of good quality research evidence to inform OHC in dysphagic stroke patients.

We have undertaken early phase trials of OHC interventions in acute stroke patients and developed an OHC education and training resource [5,6]. In our recent CHOSEN (CHlorhexidine Or toothpaSte, manual or powered brushing to prevent pNeumonia complicating stroke) trial, we evaluated the feasibility of a nurse-led complex OHC intervention in acute dysphagic stroke patients. The OHC treatments included an online and paper-based training resource for nurses and healthcare assistants (HCAs). Chlorhexidine and powered brushing were well-tolerated and patients found the powered brushing easier to use, and those allocated chlorhexidine gel preferred it to normal toothpaste.

We are planning a definitive randomised trial in UK stroke units to investigate whether our nurse-led complex OHC intervention can reduce PSP and improve clinical and health economic outcomes. As we finalise the trial funding application, we are seeking expressions of interest from stroke units to participate in the trial. We will soon be distributing some further details of the proposed trial with an EOI form via e-mail to establish interest from the National Stroke Nursing community and the Research Delivery Network. Further details will follow, so watch this space!

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Refs:

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