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A study of oral health in intestinal failure patients receiving home parenteral nutrition

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There are no published oral health studies of people with long-term intestinal failure requiring intravenous nutrition (HPN). However, medical treatments used in this patient group can impact negatively on oral health and dental care delivery.

Fifty-two HPN outpatients were recruited from a specialised nutrition clinic of a National referral centre. Consenting patients listed their medical and medication history, perceived oral health and dental treatment in a structured interview and underwent an oral examination. Findings were compared with means from the 1998 UK Adult Dental Health Survey⁽¹⁾ using one-sample *t* tests. Additionally, an e-mail questionnaire was sent to the UK HPN Group, to determine views on oral health and prescribing practices of consultant gastroenterologists (68% response rate).

The patient sample reflected the UK HPN population (BAPEN⁽²⁾). Oral health of the HPN cohort was poorer than the UK norm; patients had more decay ($P < 0.001$) fewer teeth ($P < 0.001$) and fewer sound and untreated teeth ($P = 0.023$) despite similar dental attendance. Hyperphagia, sip feeds, oral rehydration fluids and polypharmacy (in 96%), increase caries, xerostomia (in 81%) and thus oral infection risk (including oral candidiasis). The patient pathway does not include oral health information. Management of HPN-related complications with bisphosphonate therapy, anticoagulation and parenteral antibiotic prophylaxis were associated with impaired access to dental care for 33%. Patients were experiencing current problems (60%) and psychological discomfort (56%) from poor oral health, but were less anxious about dental treatment. Gastroenterologists report concern that dental disease/treatment could have an impact on patient health.

HPN patients have multiple risk factors that adversely affect oral health, and hence potential diet and well-being. Guidance on oral health and dental care provision is required.

1. Kelly M, Steele J, Nuttall N *et al.* (2000) *Adult Dental Health Survey: Oral Health in the UK 1998*. London: The Stationery Office.
2. BAPEN: British Association for Parenteral and Enteral Nutrition (2008) Annual BANS Report. Artificial Nutrition Support in the UK 2007 [B Jones B, editor]. Available at <http://www.bapen.org.uk> (accessed 07 April 2009).