Preventing health care-associated infections during enteral feeding

IN the late 1980s, enteral feeding became common practice in hospitals for patients who were unable to feed themselves. It was therefore inevitable that those requiring long-term artificial feeding – that is, for more than 30 days – would continue this practice at home.

Home enteral tube feeding (HETF) has expanded rapidly and 11,817 people were registered with the British Artificial Nutrition Survey (BANS) by the end of 2000 (Elia et al, 2001). People using HETF covered the whole spectrum of ages but nearly half were over 70 years old and most lived in their own homes.

Despite a recommendation that nutrition support teams (NSTs) should support people on artificial feeding, the survey found that only 22 per cent of NSTs were responsible for people on HETF and a third of the respondents felt they had received insufficient preparation before discharge from hospital to manage feeds at home.

As a result, it is not surprising that rates of feed contamination are highest in home settings and this reinforces the need for infection-prevention guidelines (Anderton, 2000). The process for developing these guidelines has been described in an earlier paper (Pellowe et al, 2003).

Focus of the guidelines The need for infection-prevention guidelines for enteral feeding was highlighted during the initial scoping phase of the guidelines’ development process (Pellowe et al, 2002). A consultant physician in gastroenterology, a clinical nurse specialist in nutrition and a community dietitian were appointed to assist in this development. The guidelines cover four key areas:

- Education of patients, their carers and health care personnel;
- Preparation and storage of feeds;
- Administration of feeds;
- Care of the insertion site and enteral feeding tube.

They should be read and used in conjunction with the section on standard principles of infection control, which covers hand hygiene (National Institute for Clinical Excellence, 2003).

Education of patients, carers and health care personnel As the responsibility for the preparation and administration of many feeds lies with the patient or his or her carer, and sometimes community health care personnel, it is vital that education and training in the techniques of hand hygiene and all aspects of enteral feeding take place before discharge from hospital. Follow-up training and ongoing support should also be available during the time that HETF is required.

Preparation and storage of enteral feeds In selecting the type of feed and administration system, it is important to opt for whichever requires the least handling and is compatible with the patient’s enteral feeding tube.

Wherever possible, prepackaged, ready-to-use feeds should be used in preference to feeds that require decanting, reconstitution or dilution. Many are now supplied and delivered in bulk to the patient’s home by the manufacturer. These should be stored according to the manufacturer’s instructions and stock should be rotated to prevent deterioration.

Administration of enteral feeds Before starting food preparation or setting up the administration system, hands must be washed thoroughly and the working area cleaned.

If the feeds require reconstituting or diluting, the equipment should be reserved specifically for this purpose. Feeds may be made up in advance and stored in a refrigerator, provided that they are used within 24 hours.

When connecting the feed to the administration set or the set to the enteral feeding tube, handling should be kept to a minimum. Ready-to-use feeds can be given for a whole feeding session, up to a maximum of 24 hours, but reconstituted feeds should only be administered over a maximum period of four hours. The administration sets and feed container are for single use only and must be discarded after each feeding session.

Care of insertion site and enteral tubes To maintain the patency of the enteral feeding tube, it should be flushed with fresh tap water before and after each feed or administration of medicines. If the patient is immuno-suppressed, cooled freshly boiled water or sterile water from a newly opened container should be used. The stoma (the insertion site for the enteral feeding tube) should be washed daily with water and dried thoroughly.

Conclusion Although there are areas in which the evidence for enteral feeding could be improved, these guidelines provide the evidence for establishing best practice for infection prevention and should enable patients, their carers and health care personnel to feel more confident in this area.

REFERENCES


