

## **Reduced risk of peristomal infection after percutaneous endoscopic gastrostomy**

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Percutaneous endoscopic gastrostomy (PEG) has been widely used as an effective means of enteral nutrition particularly for patients with swallowing difficulty. PEG placement is now a popular procedure to supply nutrition over the nasogastric tube in patients who need long-term feeding. Although PEG placement is a safe and uncomplicated endoscopic procedure, there is a high incidence of complications after PEG placement, most which are minor. Among PEG-related complications, the most frequently generated complication is peristomal wound infection with an occurrence rate of 3% to 30%. In the patients indicated for this procedure who are generally aged and debilitated, this complication may pose a critical problem. In the commonly used pull or push methods for PEG placement, the PEG tube is readily colonized by oropharyngeal bacteria. Infection of the PEG site is considered to be associated with contamination of the PEG catheter. Meta-analyses resulted in a statistically significant reduction in the incidence of peristomal infection with prophylactic antibiotics with the use of Penicillin or Cephalosporin. Thus, prophylactic antibiotics have been commonly used during peri-procedural period as the effective way to lower the risk of peristomal infection. However, with the increasing prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) colonization in hospitalized patients, MRSA have been recognized as an important cause of peristomal infection after PEG placement. Penicillin or cephalosporin-based antibiotics may not be helpful for reducing the risk of MRSA-related infection. Even for such situation, however, nasopharyngeal decolonization of MRSA nasal and/or skin decontamination can reportedly decrease the incidence of MRSA wound infections for patients who MRSA was recognized. Other preventive measures against peristomal infection including introducer method, use of overtube, and antiseptic spraying combined with antibiotics were reported. Once peristomal wound infections would happen, it requires continuous local wound care and have potential risk of deeper involvement, leading to longer hospital stay and possible mortality. Therefore, it should be very important to prevent peristomal infection with some effective way.