Improvement on enteral feeding by using feeding pumps in wards
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**Keywords:**
- enteral feeding
- pump assisted tube feeding

**Introduction**
As an improvement measurement for controlling the risk of infection and improving patient tolerance on enteral feeding, the dietetic department has introduced the use of enteral feeding pumps and giving sets in March 2012. The feeding pumps and giving sets are provided to wards and can be initiated by doctors, nurses and dietitians. Dietetic referral is recommended to monitor the usage of pumps and giving sets.

**Objectives**
Improvement in infection control and patient tolerance on enteral feeding.

**Methodology**
Instead of bolus feeding, patients can be fed with a more precise rate of feeding using feeding pumps - this reduces patient's intolerance to tube feeding due to aspiration, diarrhoea and vomiting. This also helps to control the risk of infection as the feeding sets are changed daily rather than being cleaned and disinfected.

**Result**
A total of four patients were started on pump feeding from March to October 2012. 100% improvement in two patients with aspiration average 84 ml 1-3x/d to <50ml 0-1x/d was seen. Three patients with diarrhea, watery to loose stool moderate to large amount 2-5x/d, improved to loose to soft stool 0-<1x/d. 88% of improvement seen. Before continuous pump feeding, the four patients were receiving 42% of their energy requirement because they were often nil-by-mouth. After receiving continuous pump feeding, 77% of their energy requirement were met (ranged from 97%-19% with one patient passed away). Furthermore, one patient was able to maintain weight and two had mild weight gain upon discharge. Data suggested that pump feeding is effective in reducing gastrointestinal complications, improving patients' tolerance to enteral feeding and improving patients' nutritional status. Thus, resulting in shorter hospital stay.