

Blockage of Feeding Jejunostomy Tube by Enteric Coated Tablet- A Rare Case

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INTRODUCTION

Feeding jejunostomy is one of the commonest general surgical procedures nowadays, more so with increased incidence of oropharyngeal and Upper GI malignancies. Feeding jejunostomy is also done in conjunction with upper GI surgeries. [1] Feeding jejunostomy is associated with various complications of tube lumen blockage is still the most rampant complication. Estimates of the incidence of clogged feeding tubes range widely, from 12.5 - 45% over the life of a tube. [2] Although with proper nursing care and specialized jejunostomy feeding solutions this complication rate is decreasing. Here we present a case of blockage of feeding jejunostomy tube with enteric coated tablet.

CASE REPORT

A 60 yr old lady undergoing radiation therapy for oral malignancy was referred to us for alternative enteral feeding methods as she was unable to take food orally due to restricted mouth opening. Feeding jejunostomy under local anesthesia was done the same day and patient was discharged two days afterwards for domiciliary care. She was advised to continue FJ feeds with regular flushing of FJ tube both before and after each feed to prevent blockage. Patient presented to us in emergency department one week later with complaint of blockage of tube. Investigations: Plain X-Ray abdomen was done to rule out tube migration or kinking. Local site was examined for signs of dislodgement or biliary leak. As there were no signs of biliary leak or peritonitis tube was flushed with water but with no success.

Intervention: revision of FJ with reinsertion of new FJ tube was done. Previous FJ tube was examined and found to be blocked with enteric coated tablet Feeding J Tube was removed and its lumen was cut to retrieve the blocking agent. Patient and her relatives have been counselled and doing well on new feeding tube.



Figure I : In-situ blocked jejunostomy Feeding tube



Table I : Methods to prevent blockage of feeding tube

- 1. Always flush the tube immediately before and after feeding with at least 30 mL (1 ounce) of water
- 2. Never mix medicine with tube feeding unless advised to do so by your healthcare practitioner.
- 3. Flush tube with at least 30 mL of water before and after all medications.
- 4. Never crush an enteric-coated, time-released, or sustained-release tablet or capsule.
- 5. Never mix fiber supplement with tube feeding formula unless instructed.

DISCUSSION

The common complications of FJ include tube blockage, peritubal leak, wound infection, intraperitoneal leak, intestinal obstruction, tube migration, tube dislodgment and fistula ions.[1,3] The tubal blockage in this case was due to enteric coated tablet which when crushed and mixed with warm milk formed a clump leading to blockage. Many immediate-release tablets can be safely crushed into a fine powder and diluted prior to administration. But, sublingual, enteric-coated, and extended/delayed-release medications should not be crushed. In addition to destroying the drug's protective coating, crushed enteric-coated tablets tend to clump and clog feeding tubes. [4]

By presenting this case we want to increase awareness regarding proper nursing care of FJ tubes and availability of specialized jejunostomy feeds and medications. Patients who have had a FJ tube placed and are being discharged for the domiciliary care need to be educated well not only regarding the nutritional aspects but also about the care of the FJ tube and associated common complications. University of Virginia has advocated a few simple guidelines to prevent feeding tubes from blocking. Simple vernacular explanation of these guidelines will surely benefit. [5] Table I provides the simple solution to prevent blockage. The treatment of FJ tube blockage is primarily conservative. Lukewarm water instilled into tube and left clamped for 20 min is the first step. This might be repeated for second time. In rare cases where conservative methods fail, surgical intervention might be required Revision, or change of path of tube may be deemed necessary.

CONCLUSION

Patient and their relatives should be counseled regarding proper care of feeding jejunostomy. Regular flushing of feeding jejunostomy tube should be done. With proper precautions tube replacements due to occlusion should hopefully become a rare occurrence.

REFERENCES

- [1]. Tapia J, Murguia R, Garcia G, de los Monteros PE, Onate E. Jejunostomy: techniques, indications, and complications. World J Surg 1999; 23:596-602.
- [2]. Dandeles L, Lodolce A. Efficacy of agents to prevent and treat enteral feeding tube clogs. Ann Pharmacother 2011; 45:670-680.
- [3]. Liao GS, Hsieh HF, Wu MH, Chen TW, Yu JC, Liu YC. Knot formation in the feeding jejunostomy tube: a case report and review of the literature. World J Gastroenterol 2007; 13:973-4.
- [4]. Boullata J, Carney L, Guenter P, Eds. Medication Administration with Enteral Nutrition. A.S.P.E.N. Enteral Nutrition Handbook. American Society for Parenteral and Enteral Nutrition, Silver Spring, MD, 2010; 309-330.
- [5]. Barnadas G. Navigating Home Care: Enteral Nutrition Part One. Practical Gastroenterology 2003; XXVII (10):13.