This case report details Trevor's* journey using The Insides™ System to help reduce the risk of dehydration and electrolyte imbalance from his double barrel Jejunostomy. This case report will focus on training a care giver to assist Trevor.

Introduction

Trevor is an 80 year old gentleman who presented with a one week history of abdominal pain and two days of fever and nausea. It was quickly discovered that he had ingested a chicken bone and it had travelled through his gastro-intestinal tract, causing multiple enterotomies in a 10 cm section of Jejunum, and become lodged 2.1 m from the Duodenal-Jejunal flexure. There was feculent contamination in all four abdominal quadrants, so the decision was made to resect the affected section of Jejunum and form a double barrel Jejunostomy to allow him to recover.

Trevor experienced post-operative delirium for four weeks post his surgery requiring a clinical watch to keep him safe. Due to his delirium, he was also unsafe to commence oral feeding so he was started on parenteral nutrition (standard 24 hour bag) and enteral feeding via a naso-gastric (NG) tube at 70 ml an hour. This nutrition regime was not sustainable because Trevor would pull at the NG tube and peripherally inserted central catheter (PICC) risking frequent dislodgment of each tube. The PICC was removed for safety but the enteral feeds remained and effectively covered Trevor's nutrition requirements with close supervision from the clinical watch.

Due to the position of Trevor's proximal stoma, he experienced high outputs of 2.5-3L/24 hours which were exacerbated by the enteral feeds. He was not receiving the full nutritional benefit of the enteral feed because it was being lost into the ostomy appliance, hence the inclusion of chyme reinfusion therapy to increase the intestinal length available for absorption and optimise his recovery. Trevor was clinically cleared to start using The Insides™ System, yet he was unsafe to use the device by himself. Trevor's wife was approached to assist with chyme refeeding and using The Insides™ System but she did not feel she was adequately prepared to do this. In the interim, the clinical watch was trained to use the Insides™ Driver and safely reinfuse Trevor's chyme under the oversight of the registered nurse in an inpatient setting. This solution was utilised effectively until Trevor recovered from his delirium.

Trevor recovered from the delirium, returned to oral feeding, and the enteral feeds were ceased but he felt he could not complete many of his activities of daily living and his ostomy cares so requested this be completed for him. Trevor was able to complete a bolus reinfusion with The Insides™ System but this required close support and training over a two week period. Due to the acute presentation, Trevor was unable to have his double barrel Jejunostomy reversed for a minimum of six months, so a long term discharge plan needed to be arranged. Trevor was transferred into a care facility where the health care assistants, under the supervision of the registered nurse, were trained to troubleshoot any issues with The Insides™ System and monitor Trevor to ensure he was completing regular bolus chyme reinfusions. The Insides *Patient Refeeding Record* was made use of to record his use, any net loss, and bowel movements. The registered nurse completed training on gastrostomy tube insertion and advanced troubleshooting to assist the health care assistants and continue to

provide a high level of care for Trevor. This care plan greatly benefited Trevor because there was an escalation plan in place if his net losses increased or his renal bloods were not within normal range. He was routinely monitored by the health care assistants and renal checks were implemented fortnightly.

Conclusion

Trevor was successfully reversed eight months after commencement of The Insides™ System. He achieved his first bowel movement 48 hours post-operatively and was discharged to his home four days post-operatively.