

Background

A high output (HO) ostomy is a ostomy which produces more than 1200 ml stool in 24 hours and is a common complication of an ileostomy with a prevalence of 20% [1,2]. It leads to a prolonged hospital stay and readmissions due to e.g. dehydration and impaired kidney function [Dr. Van Butsele, personal communication, February 2021]. Van Butsele et al. shows 11% of readmission within 90 days after a Total Mesorectal Excision (TME). TME is a procedure in which the malignant tumor in the rectum and the surrounding fatty tissue containing the lymph nodes are removed. Developing a nurse-led intervention improves knowledge among nurses, physicians, patients and relatives regarding the prevention and treatment of a HO ileostomy.

Aim

The aim of this nurse-led intervention is to reduce readmissions, prevent complications and guarantee continuity of care by providing education and follow-up postoperatively.

Methods

We used a multi method approach to start this nurse-led intervention, data were analyzed retrospective. First, literature review and expert opinion of abdominal surgeons, gastro-enterologists and clinical nurse specialists resulted in a patient brochure to inform them about a HO ileostomy. Second, a flowchart existing of the in-hospital clinical guidelines as well as medication treatment was developed to inform nurses and physicians on the ward. At last, every patient must complete a diary after discharge during two weeks and received a teleconsultation after one week of discharge to discuss patient overall wellbeing and different parameters of the diary. To improve the nurse-led intervention, patient satisfaction of the trajectory was questioned.

Results

361 teleconsultations were performed between July 2019 and December 2022 of which 93 (25.8%) patients underwent a TME procedure. A teleconsultation takes about 20 minutes and includes discussing the diary and questioning the ostomy output, weight, fluid intake, loperamide intake, as well as the ostomy care. Additional medication or nutritional advice is provided in case of any problems. In case of severe problems, e.g. dehydration and/or electrolytes disorders, patients are admitted to the emergency department. Ostomy problems are taken care on the ostomy outpatient clinic. Since the start of nurse-led teleconsultation only 4.3% of the patients with an ileostomy were readmitted within 90 days after discharge due to a HO ostomy. The satisfaction rate of the follow-up was very high (94-100%), scored on different topics. Through this nurse-led intervention, nurses and physicians on the patient unit were better informed about the prevention and treatment of a HO ileostomy.

Discussion

By applying these interventions, the readmission ratio was only 4.3%. This is in contrast to the 11% of readmissions from a previous study [Dr. Van Butsele, personal communication, February 2021] and is a reduction of more than 50%. Although not all questionnaires were returned, patients did feel safer and better informed as a result of the follow-up. Also ostomy related-problems can be traced earlier. These interventions have a positive effect on several patient-related outcomes like a better patient satisfaction, physical functioning, treatment adherence and readmissions.

Implications and future perspectives

A further and more comprehensive analyses will be conducted in the future whereby not only the TME procedures will be included, but also creating more autonomy hospital-wide by teaching nurses to provide education to patients with a newly inserted ileostomy. Development of an application that includes the diary and questionnaires could improve the follow-up.

References

- 1 Takeda et al, Surgery Today, 482-497, 2019
- 2 Baker et al, Colorectal Disease, 191-197, 2010