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ORIGINAL ARTICLE

Self-Expandable Metal Stents for Colorectal Cancer – From Guidelines to Clinical Practice

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KEYWORDS
Colorectal Cancer;
Emergency Surgery;
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Abstract
Introduction: Colonic self-expandable metal stent placement is widely used for palliation of obstructive colorectal cancer. The European recommendations for stent placement as a bridge to elective surgery in obstructive colorectal cancer were recently reviewed. The aim of this study was to evaluate the efficacy and safety of stent placement in obstructive colorectal cancer and to discuss these recent guidelines.
Materials and methods: Demographic characteristics, procedure indications, complications and final outcome in patients with obstructive colorectal cancer who underwent endoscopic stent placement between January 2012 and June 2015 were retrospectively analyzed. Statistical analysis was performed with SPSS V22.
Results: Thirty-six patients were included, 20 (56%) women, mean age 70.6 ± 10.9 years. Stent placement as a bridge to elective surgery was performed in 75% (n = 27) of patients and with palliation intent in 25% (n = 9). In 94% (n = 34) of procedures, technical and clinical success was achieved. A total of eleven (11%) complications were observed: 2 migrations and 9 perforations. No procedure related death was recorded. When stents were placed as a bridge to surgery, average time between endoscopic procedure and surgery was 11.7 ± 9.4 days (excluding three patients who underwent neoadjuvant chemotherapy). Six perforations were recorded in this group: one overt and five silent (three during surgery and two after histopathological examination of the resected specimen). Twenty-one patients underwent adjuvant chemotherapy. During the follow-up period of 14.7 ± 10.9 months recurrence was observed in five patients. None of the recurrence occurred in the group of patients with perforation.

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Conclusions: In this study, stent placement was an effective procedure in obstructive colorectal cancer. It was mainly used as a bridge to elective surgery. However, a significant rate of silent perforation was observed, which may compromise the oncological outcome of these potentially curable patients. Prospective real life studies are warranted for a better definition of actual recommendations.

PALAVRAS-CHAVE
Cancro Colorectal;
Cirurgia Urgente;
Obstrução Intestinal;
Guia de Prática Clínica;
Ponte para Cirurgia;
Prótese Metálica

Próteses Metálicas Auto-Expansíveis no Cancro Colo-Rectal – Das *Guidelines* para a Prática Clínica

Resumo
Introdução: A colocação de próteses metálicas autoexpansíveis é um procedimento endoscópico amplamente realizado como tratamento paliativo do cancro colo-rectal. As recomendações europeias para a colocação de prótese como ponte para a cirurgia na obstrução por cancro colo-rectal foram revistas recentemente. O objetivo deste estudo foi avaliar a eficácia e segurança da colocação de próteses na obstrução maligna por cancro colo-rectal e discutir as últimas recomendações publicadas.
Materiais e métodos: Análise retrospectiva das características demográficas, indicações, complicações e resultados da colocação de próteses metálicas autoexpansíveis em doentes com cancro colo-rectal obstrutivo entre janeiro de 2012 e junho de 2015. A análise estatística foi realizada com SPSS V22.
Resultados: Foram incluídos 36 doentes, 20 (56%) do sexo feminino, com idade média de 70.6 ± 10.9 anos. As próteses foram colocadas como ponte para cirurgia em 75% (n = 27) dos casos e com intuito paliativo em 25% (n = 9). Em 94% (n = 34) dos procedimentos obteve-se sucesso técnico e clínico. No total registaram-se 11 (31%) complicações: 2 migrações e 9 perfurações. Não se registou mortalidade associada ao procedimento. Nos casos como ponte para a cirurgia, o tempo médio entre o procedimento endoscópico e a cirurgia foi de 11.7 ± 9.4 dias (excluídos três doentes submetidos a quimioterapia neoadjuvante). Observaram-se seis perfurações neste grupo de doentes: uma perfuração clínica e cinco silenciosas (três intra-operatoriamente e duas após avaliação anatomopatológica da peça operatória). Vinte e um doentes foram submetidos a quimioterapia adjuvante. Após um tempo médio de seguimento de 14.7 ± 10.9 meses, registaram-se cinco casos de recorrência. Nenhum dos casos de recorrência ocorreu no grupo de doentes com perfuração.
Conclusões: Nesta amostra, a colocação de prótese revelou-se um procedimento endoscópico eficaz. Na maioria dos doentes foi utilizada como ponte para a cirurgia. No entanto, verificou-se uma taxa significativa de perfuração silenciosa que poderá comprometer o resultado oncológico de doentes tratados com intuito curativo. Estudos prospetivos da prática real podem ser úteis para uma melhor definição das recomendações atuais.

1. Introduction

Colorectal cancer (CRC) is the third most common cancer in males and the second in females worldwide.[1] Malignant large bowel obstruction is reported in up to 20% of colonic cancer patients.[2] The management of this severe clinical condition remains controversial.[3]

Malignant colonic obstruction may be managed by emergent surgery with resection and/or diversion procedures or by endoscopy with self-expanding metal stents (SEMS) placement.[4]

In the latest European Society of Gastrointestinal Endoscopy (ESGE) guidelines published in 2014, SEMS placement is recommended as the preferred treatment for palliation of malignant and metastatic colonic obstruction[3,5,6] but the role of SEMS as a bridge to elective surgery in obstructive CRC was largely modified.[3] Preoperative SEMS placement can prevent high-risk emergent surgery allowing patient stabilization and staging workup before surgical intervention.[7,8] This approach showed more favorable short-term outcomes in terms of permanent stoma formation, primary anastomosis and overall morbidity and similar postoperative mortality when compared to emergent surgery.[9–11] However, a Dutch multicentric randomized trial showed an increased morbidity and mortality in the group of patients with SEMS as bridge to surgery when compared

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