

Single-center experience in robotic-assisted colorectal surgery during COVID pandemic: First 72 cases

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[ABSTRACT]

Introduction

Keyhole surgery represents nowadays the standard approach for the treatment of colorectal pathologies. The advantages such as less pain, shorter hospital stay, quicker rehabilitation, better cosmetic effect and less tissue injury have been well established in numerous studies. In the following years, the increase in interest in robotic surgery brought about technological developments in robotic systems which is alternative option for Keyhole approach. It provides a stable tool with high-definition views and improved

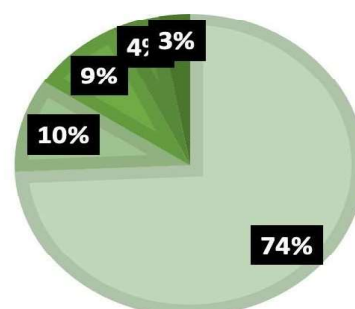
access, which enhances the possibilities for precise dissection in a narrow surgical field. These distinctive features have made it an attractive option for colorectal surgeons from BHRUT team. Our aim was to present an analysis of the first 2-years' experience of robotic-assisted colorectal surgeries using the DaVinci Xi platform.

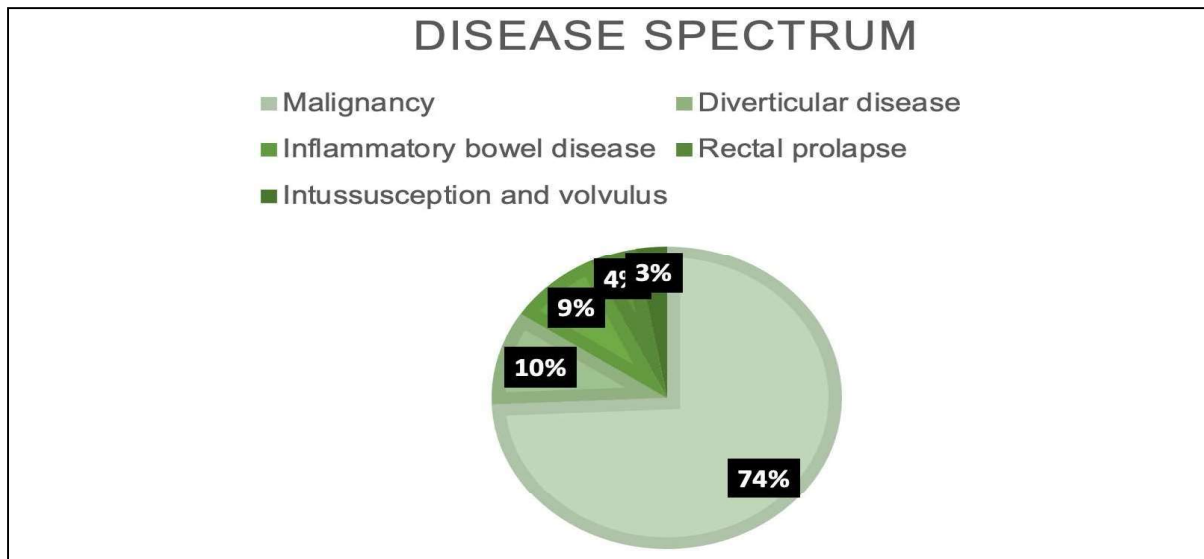
Objectives

The purpose of this study is to evaluate the safety, effectiveness, and short-term outcomes of robotic-assisted colorectal

DISEASE SPECTRUM

■ Malignancy ■ Diverticular disease
■ Inflammatory bowel disease ■ Rectal prolapse
■ Intussusception and volvulus





surgeries performed in high volume centre BHRUT Trust

Methods

This data was prospectively collected and include 72 RACP between February 2020 and December 2021.

Results

Over the 13-month study period, 72 RACP were performed including elective 57 cases and 15 semi-elective cases. These comprised: 25 right hemicolectomies, 25 high anterior resections, 6 extended right hemicolectomies, 4 low anterior resections, 4 subtotal colectomies 2 restorative proctectomies, 3 abdominoperineal excisions of the rectum, 3 rectopexies that were performed. 51.2% were female and 48.6% were male with a median age of 45

years (22–85 years) and the median body mass index was 31 (18–46) kg/m². Preoperative American Society of Anaesthesiology scores were reported as 1-2 in 72.9% (n=51) of patients and 27.1%(n=19) as 3. The median length of stay was 5 days (1-35), with readmission rate within 30 days of 8.6% (n=6) that were resolved conservatively. The mean operating time was 268 minutes and the mean console operative time was 158 minutes, with only 3 (4.3%) reported cases of conversion to open. The incidence of postoperative complications was 24.3% (Clavien–Dindo (CD) I/II- 12.9%, CD III- 10%, and CD V-1 case with superimposed COVID 19 within 30 days.

Median Operative time (Min)	265(120-620)
Median Console time (Min)	142(50-540)
Median Length of stay (Days)	5(2-35)
Clavien-Dindo III/IV (%)	11.4
Conversion Rate (%)	4.3

Conclusions

RACP is a safe and viable modality in the treatment of colorectal conditions and can be introduced safely with appropriate guidance and proctorship.

Conflict of Interests

The authors' declare that there are no conflicts of interests.

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