uro_sexual complications after low anterior resection: incidence and how to avoid

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- The incidence of urinary dysfunction may be as high as 27%
- includes difficulty emptying the bladder as well as urinary incontinence.
- Sexual dysfunction may also reach 11–55% after TME.
- For females, the inability to achieve orgasm, dyspareunia and reduction in vaginal lubrication may be distressing, even for some of the more elderly females.
- For males, nerve dysfunction may include erectile dysfunction, absence of ejaculation or retrograde ejaculation
- The increased use of neoadju vant and adjuvant radiotherapy is associated with poorer func tional outcomes.
- One of the main risk factors, poor surgical technique with resultant iatrogenic sexual and urinary dysfunction, however, may be prevented by thorough and practical understanding of pelvic nerve anatomy

Introduction

- Traditional outcome measures after surgery for colorectal cancer were survival and local recurrence.
- However, with the increasing rates of survivorship, a new focus must be placed on functional outcomes and quality of life after surgery for survivors.
- Sexuality is not considered a medical concern compared with the priority of treating colorectal cancer or cancer-related symptoms.
- However, sexual function has proved to be one of the most common and important quality of life concerns in long-term survivors.

Introduction

- Advances in colorectal cancer awareness and screening, adjuvant therapy, and surgical technique have resulted in improved survival from colorectal cancer
- When considering pelvic cancer, the focus has traditionally been on curing the cancer.
- As therapy has improved and there are more long-term survivors, sexual function and its impact on quality of life has become a key concern.
- Pelvic surgical dissection for benign conditions can also severely affect postoperative sexual function and affect quality of life.

Introduction

- Accordingly, sexual dysfunction is one of the most common long-term effects after colorectal cancer treatment .
- Yet studies show the issue is rarely and inadequately discussed among patients and providers and, thus, often untreated.
- When sexual issues are not addressed, it can have a significant negative impact on the quality of life of patients
- A multidisciplinary approach to improving quality of life for this group of patients is recommended.
- The team may include the colorectal surgeon; psychologist, psychiatrist, or appropriate counselor; sex therapist; pelvic floor physical therapist; oncologist; radiation oncologist; geriatrician; nutritionist; and exercise physiotherapist.

Etiology

- There is a need to understand the etiology and scope of the problem and develop standards for how we discuss, measure, and treat sexual dysfunction after surgery and treatment for colorectal cancer.
- To truly be effective, providers need to have excellent communication skills, an open and nonjudgmental approach, and knowledge of the potential ramifications of disease and treatment of sexuality problems
- The stigma needs to be removed from discussing this very private issue to remove the negative influences on the social well- being of colorectal surgery patients.
- While studies on sexual function after colorectal cancer treatment have been performed, most to date focused on males with a limited number of female patients.

Etiology

- The etiology of sexual dysfunction after colorectal surgery is a multifaceted issue, with both physical and psychological causes, and different causes may concurrently have a role.
- Women specifically experienced reduced lubrication, more dyspareunia, reduced vaginal size, and less sexual enjoyment after surgery compared with the time of diagnosis, making intercourse less appealing
- Surgery, chemotherapy, radiotherapy, and medication commonly given for symptomatic treatment, as well as the psychological sequelae of the diagnosis and disease itself, can affect sexual function

Surgery

- For surgical treatment, knowledge of the anatomy and areas prone to nerve damage that can impact sexual function after surgery is critical.
- in pelvic surgery, other organs as well as the pelvic nerves are very close to the pathology and therefore may be affected by both the surgical and radiotherapy treatments.
- An extensive autonomic nervous system of sympathetic and parasympathetic fibers supplies the rectum and genitourinary tract, affecting sexual function

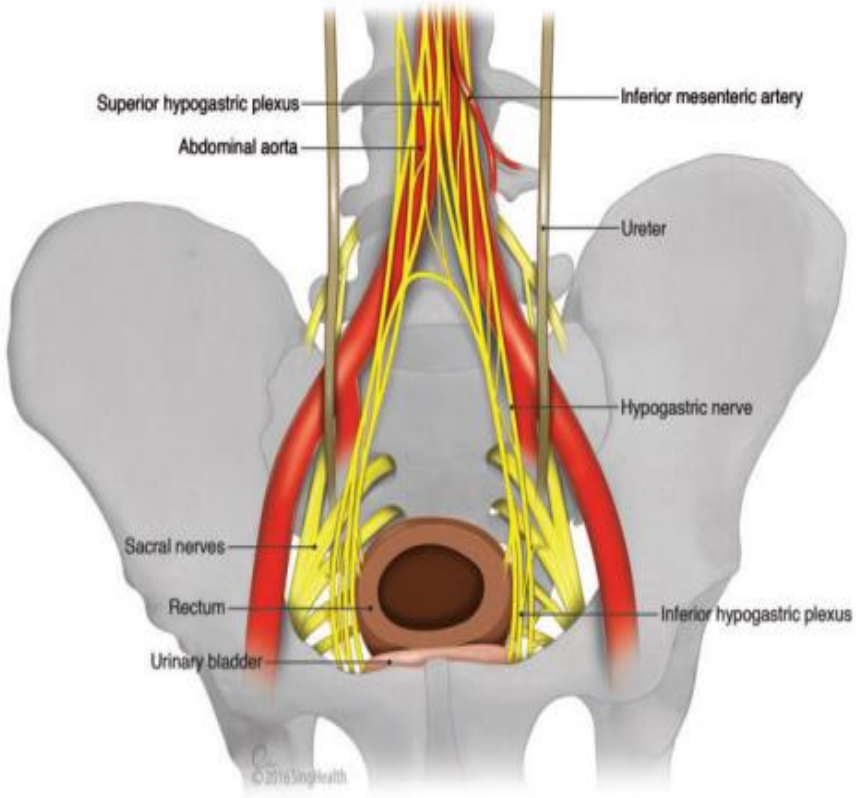

Fig. 64.1 Schematic representation of autonomic neuroanatomy. (Reused with permission from Runkel and Reiser [8]. Copyright © 2013 Springer Nature)

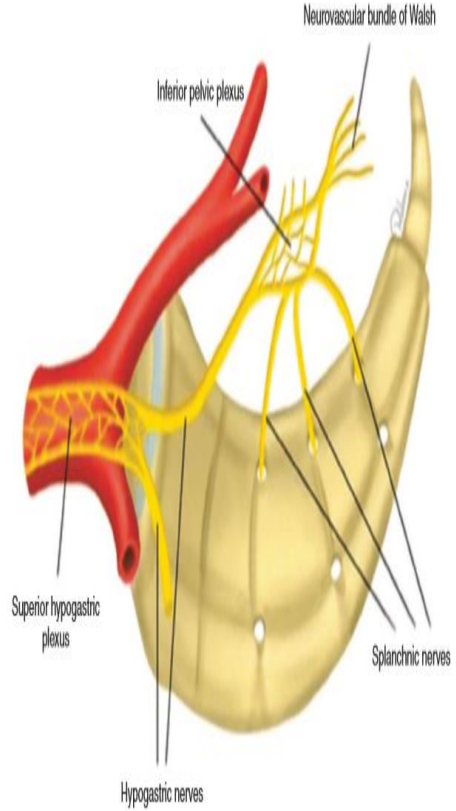

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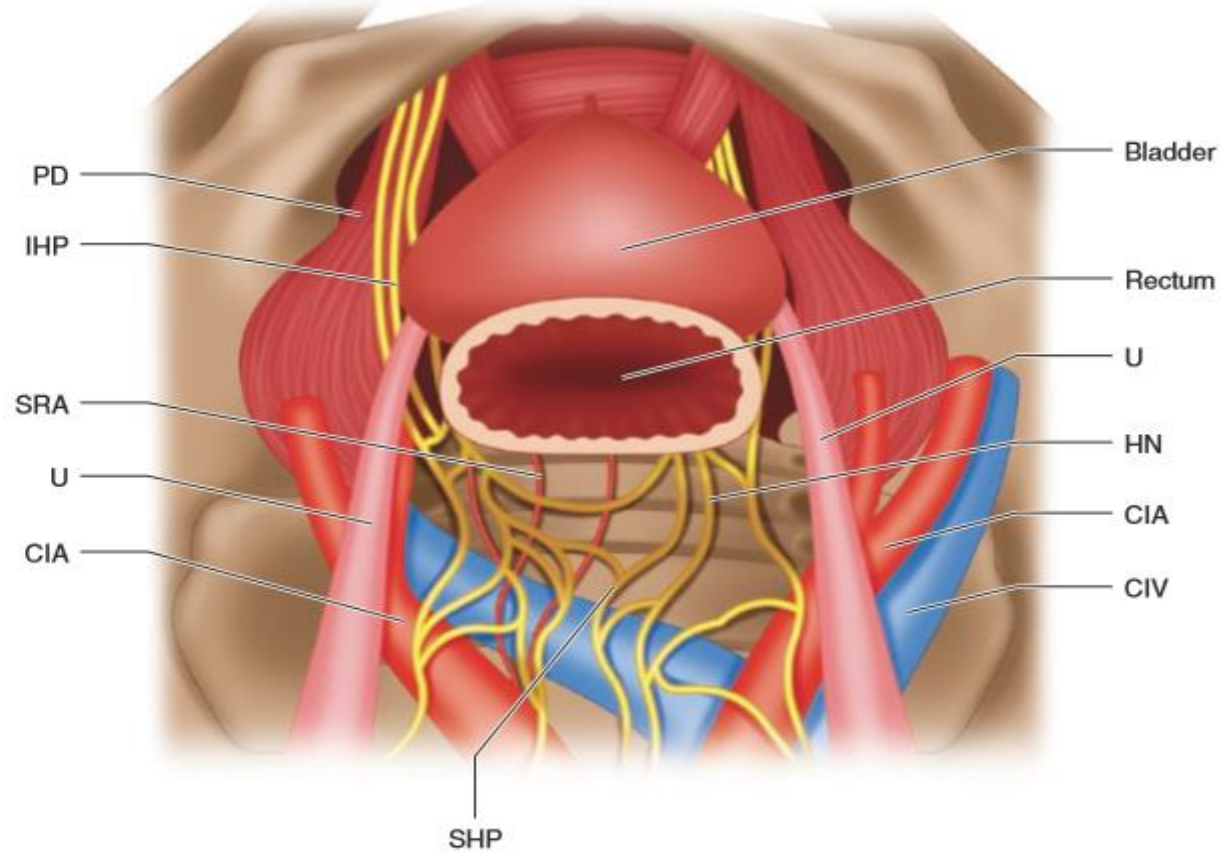
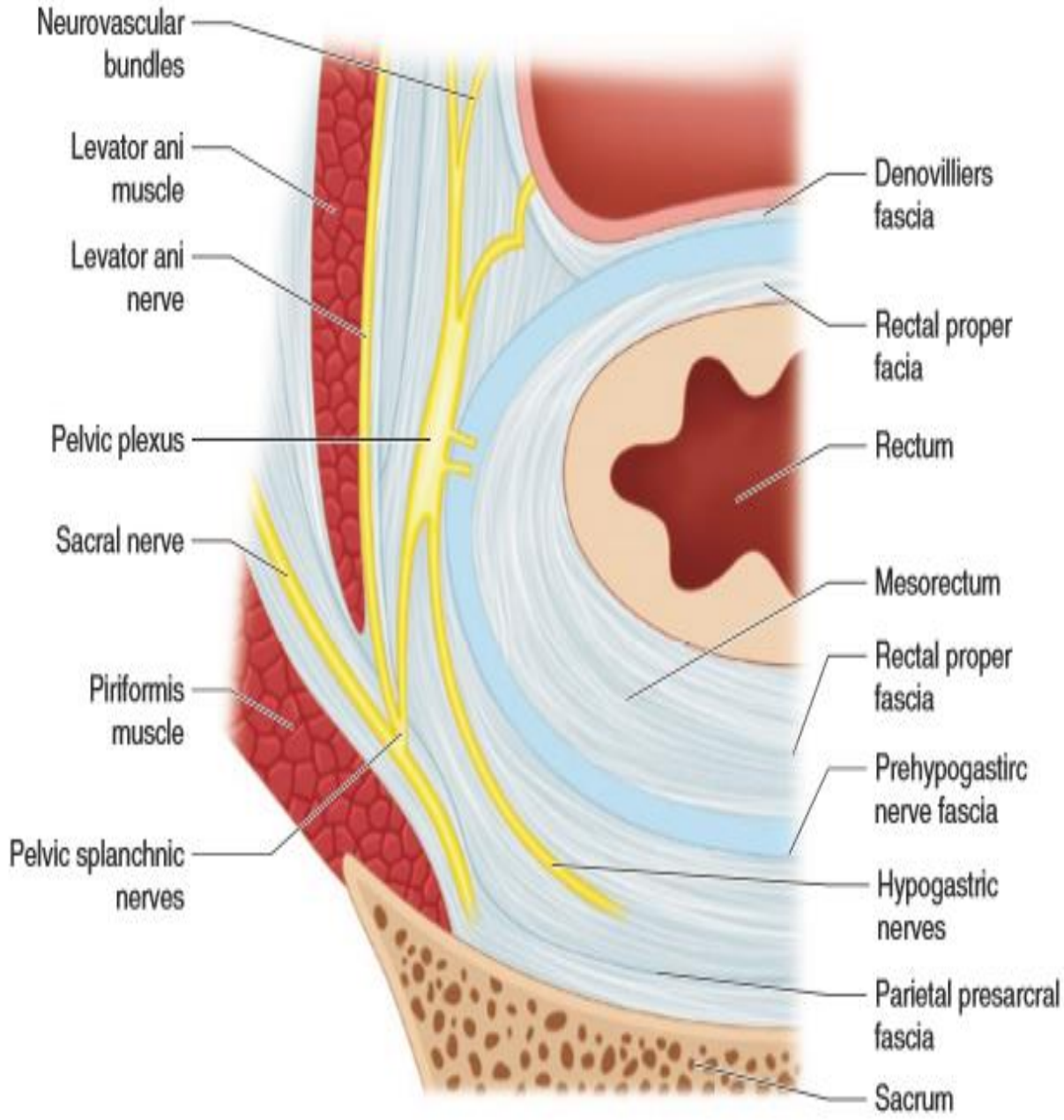
Fig. 63.1 Common sites of nerve injury in colorectal surgery



PD - pelvic diaphragm
IHP - inferior hypogastric plexus
SRA - superior rectal artery
U - ureter
CIA - common iliac artery
HN - hypogastric nerves
CIV - common iliac vein

the superior hypogastric plexus by the origin of the inferior mesenteric artery. It branches into the superior hypogastric plexus as the nerves enter the pelvis, dividing into the left and right hypogastric nerves at the sacral promontory. Damage to the superior hypogastric plexus and hypogastric nerves causes urinary urgency and incontinence in females

Fig. 63.2 The planes for total mesorectal excision and pelvic surgery



1. Ligation of the IMA should be performed 1.5–2 cm from its aortic origin to avoid damage to SHP fibres lying in front of the aorta
2. Avoid mass clamping of the IMA which may increase damage to the left trunk of the SHP due to its closer proximity compared with the right trunk of SHP located in the aortocaval plane
3. Preserve Gerota's fascia during mobilisation of the ureter and gonadal vessels as these contain SHP fibres.
4. Avoid injury of the hypogastric nerves
5. Avoid injury of the inferior hypogastric plexues

Sexual Dysfunction After Surgery for Colorectal Cancer

- ***Colorectal cancer survivors often report that their overall quality of life is good.***
- ***But when asked properly, women report significant problems with sexual functioning and relationships with their partners following treatment***
- ***Furthermore, symptoms of sexual dysfunction can be exacerbated by anxiety, depression, and fatigue which are common after colorectal surgery and in colorectal cancer survivors***
- ***The extent of the resection and presence of a stoma can also impact sexual function***

The principles of sharp dissection and direct visualization of all structures during surgery of the rectum apply in all cases regardless of whether open, laparoscopic or robotic techniques are applied.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Thank you