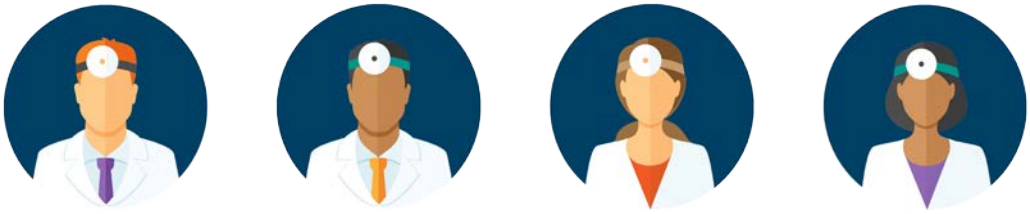

AMERICAN CANCER SOCIETY COLORECTAL CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY

Assessment and Management of Long-term and Late Effects

SEXUAL FUNCTION AND FERTILITY

- Discuss urogenital dysfunction/sexual dysfunction, dyspareunia (H), vaginal dryness (H), ovarian failure (U), premature menopause (U), gonadotoxicity (U)
- Discuss ejaculatory problems (H), erectile dysfunction (H) and sexual dysfunction (M) with survivors of rectal cancer
- For women with vaginal dryness or dyspareunia recommend vaginal moisturizers and water or silicone based lubricants during intercourse
- For men with erectile dysfunction, treat with oral phosphodiesterase 5 inhibitors
- Men who receive pelvic radiotherapy or oxaliplatin may be at higher risk for gonadotoxicity (limited evidence)
    - Evaluate for Leydig cell dysfunction
    - Initiate testosterone replacement as indicated
- Monitor and manage sexual dysfunction as needed
- Monitor and refer for psychosocial support for increased distress, depression and anxiety and poorer quality of life
- **Higher risk criteria:**
    - **Women who received pelvic radiotherapy**
    - **Men who received pelvic radiotherapy or oxaliplatin**
    - **Female rectal survivors with stoma**

URINARY FUNCTION

- Assess for stress and urge urinary incontinence (H), hematuria (U), dysuria (U), frequency (U) and overflow urinary incontinence (U)
- Recommend Kegel exercises for stress incontinence unless denervation occurred during surgery
- Recommend anticholinergic drugs for stress incontinence
- Recommend antimuscarinic drugs for urge or mixed incontinence
- Patients with hypocontractile bladders may require catheterization
- Refer patients with prolonged urinary retention postoperatively to urologist
- Recommend limiting caffeine and fluid intake and avoiding foods that irritate the bladder such as citrus and tomatoes for irritative symptoms
- Refer patients who received radiation with persistent hematuria to a urologist for cystoscopy to investigate secondary causes

BOWEL/GI FUNCTION

- Discuss chronic diarrhea (M), frequency and/or urgency of bowel movements (U), loose bowels (U), bowel function and symptoms
- Assess for rectal ulceration (U) and/or bleeding (U), rectal emptying problems/incontinence (U), incisional hernia with complications (U), sphincter dysfunction (U), rectal urgency and frequency (U)
- Refer survivors with persistent rectal symptoms (e.g. bleeding, sphincter dysfunction, rectal urgency and frequency) to the appropriate specialist

FATIGUE

- Assess for long term (after 5 years) and short term (within 5 years) fatigue (M) with validated instrument
- Recommend psychosocial support interventions and/or mind body interventions
- Recommend 150 minutes of physical activity per week plus strength training per American Cancer Society Nutrition and Physical Activity Guidelines for Cancer Survivors
- Recommend optimizing nutrition per American Cancer Society Nutrition and Physical Activity Guidelines for Cancer Survivors
- For chronic fatique, refer to rehabilitation

NEUROPATHY

- Assess for neuropathy (M)
- Focus on prevention: strong evidence for therapy is lacking
- Treat with duloxetine (moderate recommendation)
- No evidence to support tricyclic antidepressants, gabapentin or topical gel containing baclofen, amitriptyline HCL and ketamine, but these therapies have been used for other neuropathic pain conditions
- Refer to rehabilitation and pain management as needed
- **Higher risk criteria:**
    - **Patients who receive a cumulative dose of oxaliplatin>900mg/m2**
    - **Patients with pre existing neuropathy, alcoholism and diabetes mellitus**

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

AMERICAN CANCER SOCIETY COLORECTAL CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY (CONTINUED)

Assessment and Management of Long-term and Late Effects

COGNITIVE FUNCTION

- Assess for problems with cognitive impairment
- Assess for memory problems (M), decreased executive functioning skills (U), slower processing time or reaction response (U), diminished organizational skills (U), loss of language or math skills (U) and/or difficulty with concentration or attention (U)
- Screen for problems such as depression and anxiety that might worsen cognition and refer for treatment
- Refer patients with a positive screen for formal neurocognitive training

PAIN

- Assess for chronic proctitis (L) and incisional hernia with complications
- Consider opioid analgesics, utilization of pain management services, if available and incorporation of behavioral interventions/physical activity and/or rehabilitation/physical therapy

DISTRESS, DEPRESSION AND ANXIETY

- Screen for anxiety (L), depression (M) and distress (U) periodically (at least annually)
- Manage distress/depression using in office counseling resources, pharmacotherapy or prescribe exercise as appropriate
- If office based counseling and treatment are insufficient, refer survivors experiencing distress/depression for further evaluation and/or treatment by appropriate specialist
- Higher risk criteria:
    - Those with stoma and those with sexual dysfunction

DENTAL/ORAL

- Monitor for mucositis (U), loss of taste (U) and dry mouth (U)
- Recommend saliva substitutes or medications to provide symptom relief
- Recommend attention to good oral hygiene (i.e. flossing, brushing with fluoride toothpaste, regular dental care)

OSTOMY/STOMA

- Assess for urinary retention (L) and urinary incontinence (L)
- Monitor and manage sexual dysfunction as needed
- Monitor and refer for psychosocial support for increased distress, depression and anxiety and poorer quality of life

OTHER CONSIDERATIONS

More psychosocial effects (U):

- Fear of recurrence
- Fear of pain
- End of life concerns: Death and dying
- Changes in sexual function and/or desire
- Challenges with body image (secondary to surgery, hormonal therapy)
- Challenges with self image
- Relationship and other social role difficulties
- Return to work concerns and financial challenges

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

AMERICAN CANCER SOCIETY COLORECTAL CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY (CONTINUED)

SURVEILLANCE AND SCREENING

1 2 Years Post Treatment

- H&P every 3 6 months
- CEA every 3 6 months if patient is a potential candidate for further intervention
- Chest/abdominal/pelvic CT every 12 months (stages I II if at high risk for recurrence and stage III)
- Colonoscopy in year 1; if advanced adenoma, repeat in 1 year, if not, repeat in 3 years

3 5 Years Post Treatment

- H&P every 6 months
- CEA every 6 months if patient is a candidate for further intervention
- Chest/abdominal/pelvic CT every 12 months (stages I II if at high risk for recurrence and stage III)
- Colonoscopy in year 4; if no advanced adenoma, repeat every 5 years

5+ Years Post Treatment

- Colonoscopy every 5 years starting 9 years after resection if no advanced adenoma

NOT RECOMMENDED

- PET/CT Scan
- Routine blood tests (e.g. CBC, liver function test)
- After 5 years, routine CEA monitoring
- After 5 years, routine CT scans
- After 5 years, proctoscopy (rectal cancer only)
- Routine use of PET/CT at any stage

OPTIMAL TIMING UNKNOWN

- Women with known or suspected HNPCC genetic mutation, strong family history of HNPCC or FAP may be at increased risk for endometrial cancer
- Screen survivors for breast, cervical and prostate cancers as average risk according to ACS screening and early detection guidelines
- Higher risk criteria:
  - Women with known or suspected HNPCC genetic mutation, strong family history of HNPCC or FAP

HEALTH PROMOTION

- Assess information needs related to colorectal cancer and its treatment, side effects, other health concerns and available support services and provide or refer to appropriate resources to meet these needs
- Counsel survivors to achieve and maintain a healthy weight; weight management is considered a priority standard of care
- Counsel survivors to engage in regular physical activity including:
  - Aerobic exercise at least 150 minutes per week
  - Strength training exercise at least 2 days per week
- Counsel survivors to achieve a dietary pattern that is high in vegetables, fruits and whole grains, low in saturated fats and includes sufficient dietary fiber
- Assess for tobacco use and offer and/or refer survivors to cessation counseling and resources and counsel survivors to avoid tobacco products
- Counsel survivors to limit alcohol consumption to no more than 2 drinks per day for men and 1 drink per day for women
- Refer survivors with chronic bowel problems (U) or surgery that affects normal nutrient absorption to a registered dietitian

CARE COORDINATION

- Consult with cancer treatment team and request a treatment summary and survivorship care plan
- Coordinate care with other medical specialists to address effects

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

View full-text guideline at http://bit.ly/acscolorc

COLORECTAL CANCER SURVIVORSHIP CARE: LONG-TERM AND LATE EFFECTS SUMMARY

Long-term Effects Start during treatment and persist	**Late Effects** Start after treatment ends
Surgery Effects	
• Ostomy care and complications • Urogenital/sexual dysfunction – e.g., erectile dysfunction, dyspareunia, vaginal dryness, incontinence • Frequent and/or urgent bowel movements or loose bowels • Gas and/or bloating • Incisional hernia	• Increased risk of bowel obstruction
Pelvic Radiation Therapy Effects	
• Urogenital dysfunction/sexual dysfunction – e.g., erectile dysfunction, dyspareunia, vaginal dryness, incontinence • Gas • Chronic diarrhea • Rectal ulceration and/or bleeding • Rectal emptying problems/incontinence • Frequent bowel movements • Abdominal pain • Localized skin changes	• Infertility • Bowel obstruction • Bone fracture in sacral region • Second primary cancers in the radiation field
Chemotherapy Effects	
• Peripheral chronic neuropathy • Cognitive function deficits – e.g., confusion, lethargy • Chronic fatigue	• Dental/oral complications
General Psychological Long term and Late Effects	
• Depression • Distress—multifactorial unpleasant experience of psychological, social and/or spiritual nature • Worry, anxiety • Fear of recurrence • Fear of pain • End-of-life concerns: Death and dying • Changes in sexual function and/or desire • Challenges with body image (secondary to surgery, hormonal therapy) • Challenges with self-image • Relationship and other social role difficulties • Return-to-work concerns and financial challenges	
More Information	
View the American Cancer Society Colorectal Cancer Survivorship Care Guideline at: http://bit.ly/acscolorc	

COLORECTAL CANCER (CRC) SURVIVORSHIP CARE GUIDELINE CHECKLIST FOR PROVIDERS

Clinical follow-up care provided to CRC survivors should be individualized based on age, specific diagnosis and treatment protocol.

Surveillance

- ☐ Surveillance colonoscopy according to a risk-based schedule.

	Year 1 & 2	Years 3 to 5	5+ Years
History and Physical	Every 3 to 6 months	Every 6 months	Not Recommended ⊘
Carcinoembryonic Antigen (CEA) Testing	Every 3 to 6 months if patient is a potential candidate for further intervention	Every 6 months if patient is a potential candidate for further intervention	Not Recommended ⊘
Chest/Abdominal/ Pelvic CT	Every 12 months in Stages I-II if patient is at high risk of recurrence, and Stage III	Every 12 months in Stages I-II if patient is at high risk for recurrence and Stage III	Not Recommended ⊘
Colonoscopy	**In year 1:** If advanced adenoma, repeat in 1 year, if not repeat in 3 years	**In year 4:** If no advanced adenoma, repeat every 5 years	Every 5 years starting 9 years after resection if no advanced adenoma
Proctoscopy (rectal cancer survivors who undergo low anterior resection)	Not Recommended ⊘	Not Recommended ⊘	Not Recommended ⊘

Screening for Second Primary Cancers

- ☐ Age- and gender-appropriate screening for patients with an average risk, except for female CRC survivors with Lynch Syndrome.
- ☐ Female CRC survivors with Lynch Syndrome: annual endometrial sampling and transvaginal ultrasound.

Assessment and Management of Physical and Psychological Effects

- ☐ Ask if experiencing **diarrhea**, **rectal bleeding**, **rectal incontinence** or other **bowel dysfunction** and treat symptoms similar to the general population.
- ☐ Screen for **urinary incontinence** and **retention** and manage as you would a patient of average risk of urinary dysfunction.
- ☐ Ask if experiencing symptoms of **mucositis**, **loss of taste** or **dry mouth** and treat similar to population with average risk.
- ☐ Assess **fatigue** with a validated instrument, recommend physical activity similar to recommendations for general population, and refer to specialists for psychosocial support or rehabilitation as indicated.

- ☐ Screen for **cognitive problems**, and assess for **depression** and **anxiety** that may worsen cognition and refer for treatment.
- ☐ Screen for **psychosocial distress**, **depression** and **anxiety** using a validated screening tool; special attention should be paid to survivors with a stoma, and those who report **sexual dysfunction**. Monitor survivors with a stoma for **sexual dysfunction**, **distress**, **depression**, **anxiety** and QoL. Refer to specialists for support as indicated.
- ☐ Refer patients to appropriate mental health professionals or resources in the community as indicated. Follow-up to assess adherence and ensure need was met, identify potential barriers and seek alternative approaches as needed.
- ☐ Address **sexual function**. Refer survivors of childbearing age who experience **infertility** due to treatment for psychosocial support.
- ☐ Assess for **neuropathy** survivors who received oxaliplatin with Total Neuropathy Score or other validated tool and refer to rehabilitation and pain management specialists as indicated.
- ☐ Monitor patients who received pelvic irradiation for **chronic proctitis** and manage symptoms as indicated.
- ☐ Monitor survivors who are obese or who have had prior coronary artery disease and received 5-fluorouracil or capecitabine for **cardiovascular disease**.

Assessment Tools			
Fatigue	**Cognitive Problems**	**Mental Health**	**Neuropathy**
1. M.D. Anderson Symptom Inventory (MDASI) 2. Brief Fatigue Inventory 3. Functional Assessment of Cancer Therapy-General (FACT-G-7) 4. Fatigue Symptom Inventory (FSI) 5. Multidimensional Fatigue Symptom Inventory-Short Form (MFSI-SF) 6. FACT-C	1. Mini Mental State Exam (MMSE) 2. Functional Assessment of Cancer Therapy-Cognitive (FACT-Cog)	1. Distress Thermometer 2. Survivor Unmet Needs Survey (SUNS) 3. Hospital Anxiety and Depression Scale (HADS) 4. Center for Epidemiologic Studies Depression Scale (CES-D)	1. National Cancer Institute-Common Terminology Criteria for Adverse Events (NCI-CTCAE) 2. Functional Assessment of Cancer Therapy/Gynecologic Oncology Group Oxaliplatin-Specific Neurotoxicity questionnaire (FACT/GOG-Ntx) 3. Total Neuropathy Score (TNSc)

Health Promotion

- ☐ Provide routine general medical care and health promotion recommendations, and continue to treat patients' chronic conditions, recognizing cancer treatments worsen severity of many underlying chronic conditions.

Care Coordination and Practice Implications

- Initiate and maintain direct communication with all specialists involved in patient's oncology care and symptom management.
- Request treatment summary and follow-up care plan to guide coordination of follow-up care post-treatment.

View the American Cancer Society Colorectal Cancer Survivorship Care Guideline at: http://bit.ly/acscolorc