Supplementary Materials

This survivorship care plan addresses;

1. The monitoring, detection and prevention of recurrences and;

2. The provision of aftercare, which includes physical and psychosocial support for patients, with the aim of improving quality of life.

Diagnostic guidelines

Anamnesis

If possible, have the patient complete the Distress Thermometer(1) in preparation for the consultation.

The GP asks about:

- Physical complaints: (abdominal) pain, stool pattern including blood loss, weight loss;
- Fatigue (possibly quantify with the Visual Analogue Scale);
- Specific (late) side effects of chemotherapy and consequences of surgery;
- Appetite (and screening malnutrition);
- Sexual functioning;
- Psychological problems: depressive feelings, fear of recurrence, dejection, poor sleep, brooding, irritability, difficulty concentrating, existential questions, fear of the future (if necessary, use the CES-D or 4-DKL questionnaire to quantify);
- Social problems: dealing with partner, friends, family and colleagues;
- Practical problems: housekeeping, child care, work, transportation (possibly use the Patient Specific Complaints List);
- Lifestyle: weight, exercise, diet, smoking.

Alarm symptoms (symptoms that may indicate local recurrence/metastasis)

General symptoms:

- Weight loss, fatigue, anorexia, nausea.

Symptoms that may indicate an organ specific recurrence (most metastases occur in the liver):

- Liver: nausea, decreased appetite, (vague) abdominal pain, jaundice, discolored stools and increase in abdominal size (ascites);
- Lungs: dyspnea, persistent coughing, coughing up mucus with blood;
- Peritoneum: increase in abdominal size (ascites), (small) bowel obstruction, pain;
- Intestines (stoma): changes in defecation pattern, blood in stool, cramps;
- Rectum: cramps, empty urges, blood on defecation.

Physical examination

Physical examination on routine basis has little value.

- Abdomen: tenderness, resistances, hepatomegaly, ascites, distension;
- Scar: presence of herniation, evidence of recurrence in the scar;
- If rectal carcinoma is suspected rectal examination;
- Further physical examination if indicated by symptoms.

Additional follow-up tests (monitoring)

Monitoring after initial treatment aims to detect local recurrences, metastases at an asymptomatic (treatable) stage and metachronous tumors (2nd primary tumor subsequently diagnosed during follow-up). Monitoring consist of periodic checkups during the first 5 years after initial treatment. After 5 years, only colonoscopy surveillance will continue. In principle, colonoscopy surveillance is continued every 3-5 years.

Based on the tumor staging, two groups are distinguished. The first group has early carcinoma (staging T1N0M0). Here, the tumor is limited to the submucosa of the intestinal wall. The second group involves all other tumors without distant metastases (T1N1-2M0; T2-4N0-2M0).

Source: National Guideline Colorectal Carcinoma (CRC)(2).

Follow-up after colon carcinoma resection with curative intent of carcinoma limited to submucosal involvement (T1N0M0).

	Year 1	**Years 2-5**
Office visits	Every 6 months	Yearly
Physical examination	Only if indicated	
Coloscopy or computed tomography colonography	If the colon was not visualized completely preopertively: coloscopy within 3 months postoperatively If whole colon was visualized preoperatively: coloscopy after 1 year	3 years after the last coloscopy, followed by coloscopies each 3–5 years depending on the number, size, and localization of polyps

The table is not applicable after endoscopic polypectomy of a T1 carcinoma

Follow-up after colon carcinoma resection with curative intent of carcinoma extending beyond the submucosa but without distant metastasis (all stages with the exception of T1N0).

	Year 1	**Year 2**	**Year 3**	**Years 4-5**
Office visits	Every 6 months	Every 6 months	Every 6 months	Yearly
Physical examination	Only if indicated			
Carcinoembryonic antigen monitoring	Every 3 months	Every 3 months	Every 3 months	Every 6 months

	Year 1	Year 2	Year 3	Years 4-5
Abdominal ultrasonography (or CT abdomen[a])	Every 6 months	Every 6 months	Yearly	Yearly
Coloscopy of CT colography	If preoperatively the colon was not visualized completely: coloscopy within 3 months postoperatively If whole colon is visualized preoperatively: coloscopy after 1 year		3 years after the last coloscopy, followed by coloscopies each 3–5 years depending on the number, size, and localization of polyps	

[a] Computed tomography (CT) scan is indicated if an abdominal ultrasonography is not readily interpretable (e.g., in the presence of liver steatosis), or a CT scan can be considered in patients with a high risk of recurrence (T4N+) because of its higher sensitivity

Evaluation

- Symptoms possibly indicating a recurrence: refer back to specialist.
- CEA test: normal value < 5 ug/L (laboratory dependent), if elevated:
    - Repeat within 6 weeks (note: if there is a steep increase within a short time, it is advised to contact the specialist directly without repeating the CEA test).
    - CEA continues to rise: refer back to specialist with urgency.
- Imaging: If there is evidence of metastases or recurrence on ultrasound or CT scan, refer the patient back to the hospital with urgency after consultation with the specialist.

Management guidelines

Treatment of symptoms

- Diarrhea (and gastrointestinal mucositis):
    - Dietary recommendations: drink at least 1.5-2L of fluids per day, generous salt intake; >10 grams/day (watch out for contraindications), avoid large meals and

spread the food throughout the day, avoid high-fat meals, avoid coarse (insoluble) fiber, no carbonated beverages, no pungent herbs or spices, encourage the use of soluble fiber or fine fiber (vegetables, soft fruits, light brown/vol wheat bread, pasta, rice and potatoes), moderate the use of coffee, milk, alcohol and sweeteners.

    - Medication: consider bulk formers (e.g., psyllium fiber) ORS or loperamide.

- Gas formation: limit the intake of products that may cause gas formation, inform about eating behaviors that may lead to additional gas formation (drinking through a straw, eating fast, talking while eating, chewing gum, carbonated drinks).
- Pyrosis: see the Dutch College of General Practitioners (NHG) standard for management of Stomach Complaints(3).
- Oral mucositis: oro-dental hygiene, keep the mouth moist
- Colitis/proctitis:
    - Inform the patient that the absorption of fluid and salt is impaired, but that digestion and absorption of food are normal;
    - Dietary recommendations: see diarrhea;
    - Medication: consider bulk formers (e.g., psyllium fiber).
- Fatigue: normalize the sleep cycle, perform adequate physical activity, have proper distribution of activities throughout the day, take enough rest, if there is persistent fatigue consider referral.
- Hand-foot syndrome:
    - Avoid pressure, friction and hot water;
    - Medication: moisturizer, if there is pain consider a NSAID, if there is erythema: topical steroids; class 2 (Triamcinolone acetonide) or 3 (Betamethasone dipropionate) corticosteroid, if there are sensitive scaly plaques: cream against keratocyte proliferation, if there are blisters and erosion: topical antibiotics.
- Polyneuropathy:

    - Medication: NSAIDs, Capsaicin cream, antidepressants, anticonvulsants.
- Psychosocial problems: it is recommended to use, among others, the Distress Thermometer to identify excessive stress(1), and the CESD-R for depressive disorder(4). For both, the 4-DKL questionnaire more commonly used in Dutch general practice can also be used(5). Treatment focuses on the specific symptoms. Psychological support can be requested from the general practice mental health worker or (oncological) psychologist.

Prevention and rehabilitation

The national guideline also give advice on prevention and other supporting programs that can help the patient in their rehabilitation process(2). These actions can contribute to the prevention of recurrences and improved quality of life for the patient.

References

1. Tuinman MA, Gazendam-Donofrio SM, Hoekstra-Weebers JE. Screening and referral for psychosocial distress in oncologic practice: use of the Distress Thermometer. Cancer. 2008;113(4):870-8.
2. National Guideline Colorectal Carcinoma (CRC). Available from: https://www.oncoline.nl/colorectaalcarcinoom [Accessed 10th of June 2020].
3. Dutch College of General Practitioners (NHG) standards. Available from: https://richtlijnen.nhg.org/standaarden/maagklachten [Accessed 30th of November 2022].
4. Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. Applied psychological measurement. 1977;1(3):385-401.
5. Terluin B. De Vierdimensionale Klachtenlijst (4DKL): Een vragenlijst voor het meten van distress, depressie, angst en somatisatie. Huisarts Wet 1996; 39:538-47.