Assessment of Cognitive Impairment and Complaints in Individuals With Colorectal Cancer

Moira A. Visovatti, PhD, RN, ACNP-BC, OCN®, Patricia A. Reuter-Lorenz, PhD, Alfred E. Chang, MD, Laurel Northouse, PhD, RN, FAAN, and Bernadine Cimprich, PhD, RN, FAAN

More than 1.1 million individuals in the United States have a history of colorectal cancer (CRC) (American Cancer Society [ACS], 2014). Since the mid-1970s, advances in treatment and early detection have increased five-year survival rates by 14% for colon cancer and 20% for rectal cancer (ACS, 2014). Because of the prevalence of the disease and improved survival rates, understanding the effects of CRC and its treatment is critical to improving the quality of survivorship. A growing body of research suggests that individuals with non–central nervous system cancers can experience cognitive changes across the trajectory from pretreatment to as many as 20 years post-treatment (Koppelmans et al., 2012; Wefel, Vardy, Ahles, & Schagen, 2011). Potential mechanisms underlying cognitive changes include attentional or mental fatigue, psychological and symptom distress, inflammation, central neurotoxicity from chemotherapy, and changes in hormones (Merriman, Von Ah, Miaskowski, & Aouizerat, 2013). Individuals with CRC may be particularly vulnerable to cognitive changes secondary to increased proinflammatory activity associated with host–tumor interactions and cancer treatments, as well