Chemotherapy-related cognitive impairment (CRCI) was first described in the 1970s, but significant recognition of CRCI did not emerge with consistency until the late 1990s. Estimates of frequency now range from 17%–75%, and evidence suggests that CRCI, or “chemobrain” as it is referred to in the lay literature, is of significant concern to patients. A variety of potentially associated factors have been identified, including age, education level, intelligence, and social support; anxiety, depression, and fatigue; disease site, stage, and comorbidities; treatment regimen, timing, duration, and concomitant therapies; and hormonal levels, cytokine levels, damage to neural progenitor cells, and the presence of the apolipoprotein E 4 allele. Controversy exists as to the most suitable neurocognitive tests to evaluate this sequela of treatment. Neuroimaging techniques are beginning to reveal affected areas of the brain. A neuropsychologist is essential for the assessment, diagnosis, and recommendation of appropriate management strategies for this patient population. Oncology nurses should be aware of available resources, such as relevant Web sites, support groups, neuropsychologists, and cognitive retraining programs, and provide support for patients concerned about or experiencing CRCI.