J.W., a healthy 50-year-old critical care nurse with no significant medical history, was in her second marriage, postmenopausal, a nonsmoker with remote history of smoking for about one year, and reported occasional alcohol use. She presented to her primary care physician with complaints of an 18-month history of sporadic bright red blood per rectum, particularly when straining to have a bowel movement. J.W. reported having a bowel movement every two to three days and denied anorexia, weight loss, nausea or vomiting, constipation, or diarrhea. A digital rectal examination (DRE) revealed a 1 cm hard anal mass less than 1 cm from the anal verge. The mass was circumferential and located predominately at the posterior bowel wall. J.W. agreed that she should have a colonoscopy and gastrointestinal (GI) workup. The colonoscopy revealed an anal lesion that was confirmed by biopsy to be consistent with a nonkeratinizing squamous cell carcinoma. J.W. was referred to a National Cancer Institute (NCI)-designated comprehensive cancer center where she was evaluated by surgical, medical, and radiation oncologists. She denied any anal carcinoma risk factors, such as smoking, multiple sexual partners, anal intercourse, being HIV positive, being positive for human papilloma virus (HPV), or the presence of genital warts. She became very emotional when questioned about her HIV and HPV status. The physical examination revealed a healthy woman in no acute physical distress. Vital signs, routine laboratory tests, and the physical examination were within normal limits and noncontributory. Her carcinoembryonic antigen was 0.7 ng/ml (normal is less than 2.5 ng/ml in an adult nonsmoker), and HIV screening was nonreactive. Abdominal examination revealed a soft, nontender abdomen and no palpable adenopathy. A DRE confirmed the presence of a palpable, well-defined 1.5 cm firm indurated lesion inside the anal verge, posterior, consistent with location of the known cancer. Positron emission tomography/computed tomography (PET/CT) revealed hypermetabolic activity in the anorectal area. CT findings correlated with the PET findings. Clinically, J.W. was staged with T3N0MX (stage II) anal carcinoma.

Based on the workup, J.W. was diagnosed at an early cancer stage, and definitive chemoradiation offered an excellent chance of long-term disease control. Salvage surgery would be indicated following chemoradiation if minimal tumor response occurred. A detailed discussion ensued with J.W. and her husband regarding potential acute and chronic complications; physical changes including decreased libido, vaginal dryness, vaginal stenosis, and painful intercourse; changes in her chronic rectal or anal function; skin reaction including desquamation; pain secondary to chemoradiation treatment; abdominal spasms; sacral insufficiency fracture; risk of secondary malignancy; acceleration of menopausal symptoms; and a low possibility of lower extremity edema.

After discussion, J.W. agreed to proceed. She completed 5.5 weeks of chemoradiation, which was complicated by two hospitalizations during her treatment course for anal or groin moist desquamation, nausea, vomiting, diarrhea, dehydration, urinary tract infection, and pain.

Ten months after completing treatment, J.W. showed signs of depression and was referred to the psychosocial clinic. She met clinical criteria for major depressive disorder. She personally felt responsible for her cancer diagnosis, stated that little support existed in the community for patients with anal cancer, and said that she felt comfortable discussing her cancer with few people. She experienced anhedonia, guilt feelings, difficulty concentrating and focusing her attention, and anxiety related to follow-up visits. She reported significant sexual issues following her cancer treatment, including loss of libido and dyspareunia that she described as “excruciating pain.”

**Clinical Manifestations of Anal Carcinoma**

Anal or rectal discomfort and bleeding are the most common symptoms reported. A sensation of fullness or pressure in the anal or rectal area, anal discharge, itching, abnormal growth in or outside the anal canal, and change in bowel habits all are signs and symptoms of anal carcinoma (Frisica & Fry, 2008). Pain is less frequently reported. Fecal soiling is common, but gross fecal incontinence is uncommon, unless destruction of the sphincter has occurred (American Cancer Society [ACS], 2008a; Chao, Perez, & Brady, 2001; Minsky, Hoffman, & Kensen, 2001).

**Key Assessments in Patients With Anal Carcinoma**

Essential components for diagnostic workup include a thorough history, review of systems, and physical examination focusing on the extent of the primary tumor and the competence of the anal sphincter. Regional lymph nodes should be palpated, adjacent organs checked for direct invasion, and anogenital areas examined for any concurrent malignancy. If lymph nodes are enlarged, a fine needle aspiration or surgical excision should be performed.