Persistent Ovarian Endometrial Stromal Sarcoma

Case Study

One month after terminating her fourth course of chemotherapy because of disease progression, Ms. N, a 50-year-old woman with endometrial stromal sarcoma (ESS) of the ovary complained of worsening symptoms including increased shortness of breath, increased abdominal girth, and inability to eat. She was treated immediately with thoracentesis and pleurodesis to relieve the symptoms of her malignant pleural effusions. Although her treatment history limited her possible treatment options, she requested a trial of palliative chemotherapy to improve the quality of her remaining life.

Ms. N’s treatment history was long and complicated, as is often the case with persistent gynecologic malignancies. She had been diagnosed with stage III low-grade ESS approximately four years earlier after an abdominal hysterectomy and bilateral salpingo-oophorectomy for presumed endometriosis. Megestrol acetate prevented disease progression for 27 months, after which an exploratory laparotomy and biopsy revealed recurrent low-grade ESS. Tumor debulking and omentectomy were attempted, but cytoreduction was suboptimal. Treatment with nine courses of cisplatin failed to prevent disease progression, but treatment with paclitaxel produced stable disease for seven months. Ms. N subsequently was treated first with doxorubicin and then with paclitaxel again, but neither prevented further disease progression. After two rounds of surgery and four rounds of chemotherapy, all conventional treatment options had failed. Her request for palliative chemotherapy therefore represented a clinical challenge.

Clinical Problem Solving

Addressing this challenge are Suann K. Mitchell, RN, CCRP, a research nurse in the Department of Obstetrics and Gynecology, and Linda F. Carson, MD, Patricia L. Judson, MD, and Levi S. Downs, Jr., MD, who are doctors, all at the Women’s Cancer Center of the University of Minnesota in Minneapolis.

How do you treat a patient who has requested palliative chemotherapy for a terminal cancer when no conventional therapies have been effective?

In the palliative setting and in settings in which treatment is not expected to be curative, the long-term tolerability and nonhematologic toxicity of agents must be weighed against their potential to limit disease progression and palliate disease symptoms. The failure of prior regimens suggested that the Ms. N’s cancer was resistant to hormone therapy, cisplatin, paclitaxel, and doxorubicin; therefore, further use of these agents was not warranted. Treatment options were assessed based on clinical experiences and results from clinical trials in related gynecologic malignancies. Although ifosfamide has shown activity in chemotherapy-naive patients with nonovarian ESS (Sutton, Blessing, Park, DiSaia, & Rosen, 1996), Ms. N’s heavy treatment history and poor nutritional status ruled out this option. Another treatment option was topotecan (Hycamit, GlaxoSmithKline, Research Triangle Park, NC), which is active in the relapsed ovarian cancer setting and has shown promise in other gynecologic malignancies, including cervical (Fiorica et al., 2002) and uterine carcinomas (Finkler & Holloway, 2002). Topotecan most often has been administered by bolus IV injection at 1.5 mg/m² per day for five consecutive days every 21 days. However, extensively pretreated patients are especially susceptible to myelotoxicity; as a result, alternate schedules and lower-dose regimens currently are under investigation in patients with epithelial ovarian cancer (Morris & Munkarah, 2002). Lower-dose topotecan has been active and well tolerated in patients with relapsed ovarian cancer at the Women’s Cancer Center of the University of Minnesota. Furthermore, topotecan’s hematologic toxicity was noncumulative and this regimen generally was not associated with any severe nonhematologic toxicity, making it an appropriate choice for palliative therapy. Therefore, a compassionate use regimen of low-dose topotecan 1 mg/m² per day for five consecutive days in a 21-day cycle was selected.

How do you devise palliative therapy for a patient with terminal disease?

Careful observation for possible toxicities is essential, and patient feedback and input should be strongly encouraged. Although Ms. N was treated cautiously, severe symptoms emerged late during her first cycle of therapy, with grade 3 myelotoxicities (anemia, leukopenia, and thrombocytopenia), as well as coagulopathy. Admitted to the hospital because of weakness and shortness of breath, she decided to cease chemotherapy and enter a hospice program. The team followed her wishes but continued to monitor her status closely in the hospice setting. Over the ensuing three months, the hospice team noted an unusual improvement in her pain, nausea, and respiratory status. In contrast with the gradual decline in performance status and quality of life that typically are associated with terminal illness, the improvement of her physical symptoms and quality of life was both unexpected and remarkable. Moreover, the goals of patient management in the hospice setting involve comforting patients and helping them to accept the inevitability of their death; therefore, a patient who shows dramatic signs of recovery while in hospice care is a challenge to fundamental patient management strategies.

How do you treat a patient in the hospice setting who appears to be recovering?

Communication and ongoing assessment are key to effective management of patients...