

Nurses' concern for infections grows



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A RECENT report on invasive fungal infections (IFIs) has revealed that concerns among oncology nurses about IFIs in their cancer patients are well-founded. The report, released by the publishers of *ONSEdge*, also provides additional information on the likely cause of the increase, identifies patients who are most at risk, and describes what can be done to prevent the infections.

The Knowledge Report: Invasive Fungal Infections, the white paper that reviews the survey findings, revealed that the incidence of IFIs has risen sharply in the past 2 decades mostly because of the immunosuppression experienced by the larger numbers of patients undergoing hematopoietic stem cell transplant (HSCT) as treatment for cancer. Because these high-risk patients have an increased susceptibility to bacterial and viral infections, oncology nurses have become increasingly concerned about the significant number of opportunistic infections that may arise due to fungi. In a study published in the jour-

High-risk patients have an increased risk of bacterial and viral infections.

al *Clinical Infectious Diseases* (2010; 50[8]:1091), researchers have shown that among patients who have received HSCT, the *Aspergillus* species of mold is the most common cause of IFI.

The study's findings revealed that 68% of respondents agreed with the statement, "I am increasingly concerned about invasive fungal infections as a complication in my high-risk patients."

According to background information provided in the report, patient populations as identified by evidence-based guidelines include

- Those with profound, prolonged neutropenia
- Those with acute leukemia or myelodysplastic syndromes
- Allogenic HSCT recipients
- Patients with graft-versus-host disease (GVHD, a frequent complication of HSCT)
- Autologous HSCT recipients with mucositis.

The survey also revealed that oncology nurses are not only concerned about IFIs, they also understand the risk of invasive fungal infections in certain oncology patient populations. Specifically, 70% of respondents indicated that patients with myelodysplastic syndromes who were neutropenic were at high to very high risk of IFIs. In addition, 79% indicated that patients with acute myelogenous leukemia who were neutropenic were at high to very high risk. Furthermore, investigators reported that 66% believed that patients who were

stem cell transplant recipients and who developed GVHD were also at high to very high risk for IFIs.

The white paper also reviewed the use of prophylactic agents, a method that 77% of respondents believed to be the best way to reduce the risk of developing IFIs. In a study published in the *Journal of Clinical Oncology* (2007;25[34]:5471), researchers reported that the use of antifungal agents to prevent infection significantly reduced the incidence of IFIs by 50%, with antifungal prophylaxis decreasing overall mortality by 21% and fungal-related deaths by 45%.

The nurses indicated that their primary roles in discussing IFI prophylaxis in patients and caregivers include discussing

- The administration of the antifungal agent selected
- Symptoms that a patient or caregiver should report
- The importance of prophylaxis with specific antifungal agents
- Environmental factors to avoid during treatment in order to minimize exposure to IFIs.

"The encouraging news, despite the rising incidence of aspergillosis, is that there are effective methods for preventing and treating IFIs," concluded the report's authors. "A recent review noted several studies that are demonstrating improved outcomes in preventing and treating *Aspergillus* infections, and oncology nurses are playing an important role in this process." ■

Chemoradiotherapy can help cure cervical cancer

THE ADDITION of a chemotherapy drug to radiotherapy improves survival for patients with locally advanced cervical cancer compared to treatment with radiotherapy alone, according to a study published in *Clinical Oncology* (2010;22[7]:590).

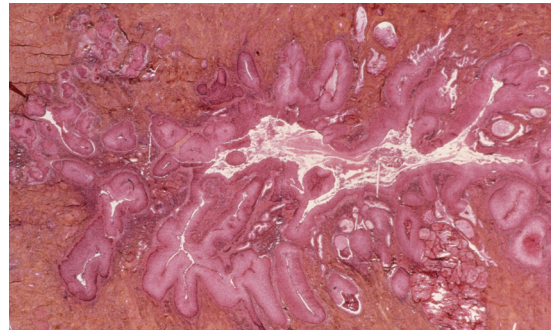
According to background information provided by the authors, a combination of radiotherapy and cisplatin have already been shown to be more effective than radiotherapy alone for the treatment of cervical cancer. However, data on the long-term effects have not been available.

Paul Symonds, MD, from the Department of Cancer Studies and Molecular Medicine at the University of Leicester, and colleagues conducted the study to

explore the long-term effects of cisplatin, a well-known platinum-based chemotherapy drug, in addition to radiotherapy for the treatment of cervical cancer.

Using an audit led by Dr. Symonds, the research team studied the case histories of 1,412 patients from 42 different cancer treatment centers to obtain information on treatment type and recurrence rates over a 5-year period. Then, statistical analysis was used to eliminate variable factors in comparing radiotherapy with the dual treatment.

Researchers discovered that survival was significantly better for patients receiving chemoradiotherapy compared with those receiving radiotherapy alone. Specifically, the addition of cis-



Advanced cervical cancer seen in a light micrograph

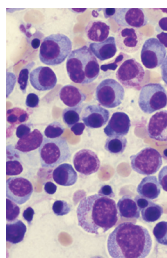
platin to radiotherapy treatment of cervical cancer reduced the likelihood of death by 23%.

“This audit showed a marked improvement in 5-year survival of locally advanced cervix cancer compared to the last national audit of patients who were treated in 1993,” Dr. Symonds commented. “Moreover, the UK results, as derived from a total of 42 centers (most district general hospitals), show that the results in the UK are now compatible with the best international practice,” he concluded. ■

Zoledronic acid effective for multiple myeloma

ZOLEDRONIC ACID (Zometa) is more effective than clodronate at treating patients with newly diagnosed multiple myeloma and significantly improves survival in these patients, according to a study presented at the 2010 ASCO annual meeting.

The study, presented by Gareth Morgan, MD, of The Royal Marsden Hospital, Surrey, United Kingdom, evaluated the effect of zoledronic acid compared to clodronate plus antimyeloma therapy on skeletal-related events in 1,960 patients with newly diagnosed multiple myeloma.



Bone marrow aspirate that shows multiple myeloma

After 3.7 years of follow-up, researchers found a 24% relative reduction in the number of skeletal-related events in patients treated with zoledronic acid (27%) compared to those treated with clodronate (35.3%).

“These data should be viewed in context of ... historical data ... [showing] that 50% of people get a skeletal-related event in control arms, so it’s a significant difference that would be even greater if you compared it to placebo,” Morgan said.

In addition, patients treated with zoledronic acid had an overall

survival of 5.5 months longer (50 months) compared to those who were treated with clodronate (44.5 months). Those who were treated with zoledronic acid also had a 2-month longer progression free survival than patients who were not.

“The survival benefit was not related to the prevention of skeletal-related events but was an anti-myeloma effect,” Morgan concluded.

Both the zoledronic acid and clodronate were generally well tolerated among the patients, Morgan added. ■