About the Editor

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Perry W Grigsby is Head of the Radiation Oncology Gynecology Service and Director of the Brachytherapy Center at the Mallinckrodt Institute of Radiology at Washington University in St Louis (MO, USA). He has published extensively on the treatment of gynecologic cancers. He is also an authority on the use of PET and MRI of cervical cancer. He was elected a fellow in the American College of Radiology in 1995.

Foreword

Advances in cervical cancer management

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Cervical cancer is a global health problem and is the third most common cancer in women worldwide. Approximately 85% of the cases occur in women living in developing countries. The majority of invasive cervical cancers are caused by human papillomavirus (HPV) types 16 and 18. Screening for cervical cancer with Pap cytology has greatly reduced the incidence of invasive cervical cancer. Screening that incorporates high-risk HPV detection is increasingly utilized. Screening strategies will continue to evolve by incorporating new technologies that can best be utilized in each country. Vaccines that protect against HPV types 16 and 18 are available. The maximum protective effects of these vaccines are obtained when given before the onset of sexual activity. The vaccines have also been shown to have a protective effect in young adults.

The staging of cervical cancer is by the International Federation of Gynecology and Obstetrics (FIGO) clinical staging system. The diagnosis is established by histological evaluation of cervical biopsy specimens. The use of serum and immunohistochemistry markers is supplementary. MRI and whole-body PET imaging facilitate the evaluation of disease extent.

Surgical treatment of cervical cancer is often restricted to those patients with primary tumors <4 cm and those with no known lymph node metastasis. Variations of the traditional radical hysterectomy and lymph node dissection are being developed. Patients with tumors >4 cm and those with known

lymph node metastasis are most often treated with concurrent chemoradiation. Radiation consists of external irradiation and internal brachytherapy. Concurrent chemotherapy is usually weekly cisplatin.

The screening and diagnosis of cervical cancer is evolving. Newer surgical procedures for early-stage disease are being developed. Radiation techniques including intensity-modulated radiation therapy and image-guided high-dose-rate brachytherapy are increasingly utilized. Systemic therapies with cytotoxic and biological agents are being developed.

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