Best Practice & Research Clinical Obstetrics and Gynaecology
Vol. 19, No. 4, pp. 591–609, 2005
doi:10.1016/j.bpobgyn.2005.03.001
available online at http://www.sciencedirect.com

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Managing advanced-stage cervical cancer

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The current staging methods and the definition of advanced cervical cancer are discussed. The clinical International Federation of Gynaecology and Obstetrics (FIGO) staging system has been found to be inaccurate and this limits treatment planning. More accurate management could be based on surgicopathological features of the tumour. However, the latest imaging techniques have the potential to give us this information in a non-invasive way. To deliver optimal treatment in advanced cervical cancer, we need to optimize the way we categorize the prognostic groups. Accurately delineating the extent of the disease will potentially minimize treatment morbidity and improve survival. The techniques of chemoradiation are also discussed in detail.

Key words: cervical cancer; advanced stage; imaging; management.

The performance of regular Pap smears has played a major role in decreasing the incidence of cervical cancer worldwide. Advanced-stage cervical cancers are mainly diagnosed in women who remain largely unscreened. The survival of women with cervical cancer is directly determined by the extent of disease at the time of diagnosis. In most developed countries, the incidence of and mortality from cervical cancer has decreased significantly over the last 10 years. The lifetime risk of cervical cancer in 1994 in Victoria, Australia was 1:80, and this had decreased to 1:250 by 2002. The incidence and mortality rates for cervical cancer in Victoria, Australia are shown in Table 1.[1] The incidence in women over the age of 75 years is higher than in the other age groups, again because of reduced screening. Figure 1 shows the incidence of cervical cancer by

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Table 1. The incidence and mortality rates of cervical cancer in Victoria, Australia.

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	304	245	226	194	214	172	150	150	156
Crude incidence rate per 100 000	13.5	10.7	9.8	8.3	9.1	7.2	6.2	6.2	6.3
Mortality	76	76	65	72	56	48	52	63	44
Crude mortality rate per 100 000	3.4	3.3	2.8	3.1	2.4	2.0	2.2	2.6	1.8

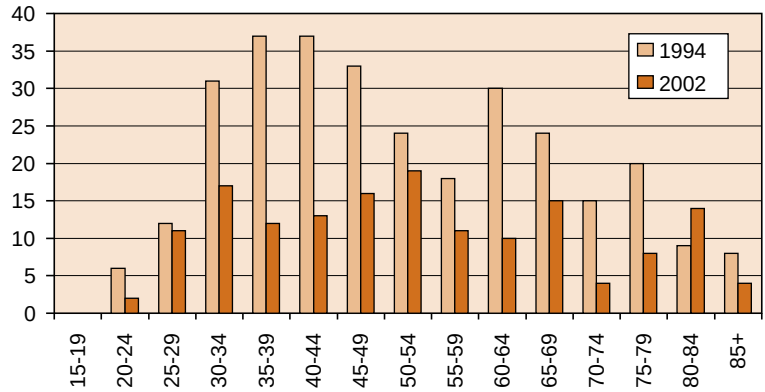

Figure 1. Incidence of cervical cancer by age group in Victoria, Australia in 1994 and 2002. Source: Canstat. *Cancer Council of Victoria 2002.* 2004.

age group in 1994 and 2002. The 10 most common female cancers in Victoria, Australia are shown in order of frequency in Table 2.

Prognostic factors for cervical cancer include stage, tumour volume and depth of invasion, histologic type, lymph node metastases and lymphovascular invasion. The size of the primary tumour is an important prognostic factor and influences the choice of primary therapy.

DEFINITION OF ADVANCED CERVICAL CANCER

Traditionally, FIGO stages IA, IB and IIA cervical cancers have been regarded as early disease, and FIGO stages IIB, IIIA, IIIB, IVA and IVB have been regarded as advanced

Table 2. The 10 most common sites of female cancers in Victoria, Australia (in order of frequency).

1994: Breast, bowel, melanoma, lung, lymphoma, endometrium, cervix, ovary, leukaemia, bladder
1997: Breast, bowel, melanoma, lung, lymphoma, endometrium, ovary, head and neck, leukaemia, pancreas
2002: Breast, bowel, melanoma, lung, lymphoma, endometrium, ovary, bladder, head and neck, leukaemia