Brachytherapy Infrastructure in Poland (2002-2008)

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Purpose: One of the current ESTRO projects by is named The Pattern of Care for Brachytherapy (PCB). The first stage of this project was a survey of brachytherapy facilities in the en tire European area for 2002. This data, crucial for the completion of other ESTRO projects, has been assembled from almost all European countries and will ultimately help to shape future European brachytherapy policy. This paper presents the state of brachytherapy facilities and applications in Poland, during the period 2002-2007.

Material and methods: In 2003, an ESTRO Questionnaire on Brachytherapy Practice in Europe was distributed to 25 Polish centers with brachytherapy facilities. They provided data on brachytherapy infrastructure in Poland for 2002. The same questionnaire has been sent out to collect the data for 2004 in order to observe the actual trends and to compare with the estimates given in the previous questionnaires. From 2006 on the data have been collected on a yearly basis.

Results: In Poland, there are 25 brachytherapy facilities, evenly distributed throughout the country. The numbers of afterloaders installed in these facilities, as of 2007 are: LDR - 6, HDR - 21, PDR - 4. The brachytherapy afterloading equipment is modern and in good technical conditions. The population of Poland is about 38.5 million and the total number of patients undergoing brachytherapy irradiations is about 8000 per year. This is a very large number as compared with other European countries. The brachytherapy is applied for virtually all tumour localizations (HDR), however about 63% brachytherapy is used for treating gynecological tumours. The proportion between HDR and LDR units is changing - the number of LDR units is decreasing. The number of radiation oncologists specialized in gynecological tumours is adequate. There is a need for training of more radiation oncologists in complex HDR techniques, such as prostate, breast, oesophagus, lung brachytherapy. The medical physics staff is adequate to assure proper quality of brachytherapy.

Conclusions: Current number of brachytherapy facilities seems to be adequate taking into consideration the population and estimated cancer incidence in Poland. The brachytherapy facilities are uniformly distributed throughout the country. There is a need for further training of radiation oncologists in more complex HDR techniques in order to take full advantage of the existing equipment. The PCBE study should be continued in order to monitor the changes and progress in brachytherapy development.