

The thesis deals with the description of the role and procedure of a radiographer at individual types of brachytherapeutical applications. It summarizes the history of brachytherapy, its division according to the localization of the source of ionizing radiation, according to the length of irradiation and the dose rate of the source. It describes the principle of both manual and remote afterloading, it indicates the sources of ionizing radiation and used values and units.

It deals with individual types of brachytherapy – interstitial, intracavitary, intraluminal and surface ones, describes their application at existing types of tumour diseases and specifies the workload of particular members of brachytherapeutical team at applications.