Endometrial cancer is the most common malignancy of female genital organs. The incidence is the most affluent among Caucasian women. Although it has comparatively low mortality rate, compared with other gynaecological cancer, it is capable of aggressive behaviour.

Endometrial cancer is common in postmenopausal women at the age between 50 and 70 years. The incidence rises with age. The main risk factors are overexposure to exogenous (Hormone Replacement Therapy) or endogenous estrogens, ovarian disorder and obesity. The main protective factors are long term influence of progesterone (gestagene).

The most common symptom is postmenopausal vaginal bleeding and discharge; in younger patients menometrorrhagia is common.

Transvaginal ultrasound and curettege are the main methods in establishing a diagnosis. These days hysteroscopy with target biopsy tends to replace them.

Endometrioid adenocarcinoma, well differentiated tumour, is the most frequent type of endometrial cancer. The serous papillary adenocarcinoma and clear cell adenocarcinoma are more aggressive in behaviour and have worse prognosis.

Tumours extend directly into the underlying myometrium or spread to cervix, vagina, ovarium and serosa (metastasis implantation development) and invade directly to the lymph nodes.

Surgery is the main treatment modality; this method is often combined with radiotherapy. Standard surgery includes total abdominal hysterectomy, bilateral salpingo-ophorectomy and pelvic lymphadenectomy. At the stages pT1c and pT2 (pT1c in the uterine corpus) paraaortic lymphadenectomy should be obligatory. It is often abandoned due to extensive radical surgery. In these cases the patients should undergo a postoperative radiotherapy of the pelvic and paraaortic lymphonodes. Patients who are not medically fit for surgery or have inoperable diseases are treated with radical radiotherapy.

Postoperative radiotherapy is indicated if risk factors are present (depth of invasion into one half or more of the myometrium, histological grade 3, etc). Radiotherapy of regional lymphonodes, including pelvic and paraaortic lymphonodes, is often limited to lymphonodes of the small pelvis.

In a group of 85 patients who underwent surgery and radiotherapy at Dpt. Radiotherapy and Oncology (FNKV) in Prague, 26 patients were at the stage pT1c and pT2 with pT1c in the uterine corpus. In this group of patients at the stage pT1c (without paraaortic lymfadenectomy) we can find 2 local recurrences, 5 patients with distant metastases and 3 cases of metastases in paraaortic lymphonodes.

Radiotherapy of paraaortic lymphonodes should be managed in cases, when paraaortic lymphadenectomy could not be proceeded and patient is at the stage pT1c.

Radiotherapy brings low rates of locoregional recurrences but it causes a lot of postradiation complications. It is necessary to consider costs and benefits in every patient.