

Endometrial carcinoma - comparison of preoperative MRI and postoperative pathologic findings

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Purpose

To compare the results of preoperative MR imaging and postoperative pathologic evaluation in patients with stage I endometrial carcinoma.

Materials and Methods

79 women, aged 44-81 years, with clinical stage I endometrial carcinoma underwent pelvic MRI at a 1,5 T system. T1-weighted, T1-gadolinium enhanced, T2-weighted and fat-saturated images were obtained in three planes. The depth of invasion, tumor volume and lymph node involvement were assessed and compared to post-surgery findings.

Results

In 5 cases clinical stage I was excluded and stage II was diagnosed. In a group of 74 patients stage IA was found in 17 women, IB – in 37, IC – in 20. Involvement of pelvic lymph nodes which had more than 10 mm in diameter was showed in 10 women. The disease was overestimated in 5 patients (IC/IB in 4, IB/IA in 1) and underestimated in 1 patient (IB/IC). The diagnostic accuracy of MRI in staging was 93,6%. In 2 cases additional information about ovarian cystic lesions suspicious for malignancy was provided by MRI – in 1 case ovarian carcinoma, in 1 – borderline tumor were finally diagnosed.

Conclusions

MR imaging allows more precise staging of endometrial carcinoma as compared to clinical staging which is important for the choice of the treatment method and planning of the extent of surgery.