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RISK OF MALIGNANCY IN PATIENTS WITH UTERINE PROLAPSE

Hypothesis / aims of study

Uterine preserving surgery is one of the treatment options for uterine prolapse recently. However, there are limited data on the possible uterine pathologies in patients of uterine prolapse. Routine pathological examination of hysterectomy specimens may not be a standard practice in some centres. This study aims to investigate the chance of missing uterine malignancy and other pathologies in performing uterine preserving surgery.

Study design, materials and methods

This is a retrospective observational study performed in a university hospital. Patients with hysterectomy done for uterine prolapse from 2003 to 2009 were included. Patients with confirmed malignancy before operation were excluded. Asymptomatic patients were defined as having symptoms of uterine prolapse alone without any symptoms of endometrial or cervical malignancy. Pre-operative detailed investigations have been only performed for patients with symptoms of abnormal vaginal bleeding which may be suggestive of uterine malignancy. Medical records of all eligible patients were reviewed. Their demographics data, presenting symptoms, investigations, the type of operations and the histopathology were collected and analysed.

Results

Within these 7 years, there were in total 434 patients who underwent hysterectomy for uterine prolapse. Eight of them were excluded due to incomplete medical records, resulting in 426 patients eligible for data analysis. Their mean age was 64.3±10.8 (range 38-93 years old) and the mean number of vaginal births was 3.6±1.8 (parity 1-10). Vaginal hysterectomy was the most commonly performed procedures (n=403, 94.6%), others had laparoscopic assisted vaginal hysterectomy (n=17, 4.0%) and total abdominal hysterectomy (n=6, 1.4%). Eighty-four percent (n=357) were menopause; and 71% (n=301) had no symptoms suggestive of uterine malignancy.

The result of the histopathology of uterus was shown in Table 1. Two cases (0.47%) of endometrial malignancy were found. Among these 2 cases of endometrial carcinoma, one of them presented with post-menopausal bleeding besides the symptoms of urogenital prolapse. Subsequent investigations showed complex hyperplasia with atypia. Thus laparoscopic assisted vaginal hysterectomy with bilateral salpingoophorectomies and repair of pelvic floor were performed. Pathology showed stage IA endometrial carcinoma and no adjuvant therapy was needed. The other patient was totally asymptomatic. The pathology of vaginal hysterectomy showed stage IA endometrial carcinoma. Hence, she underwent laparoscopic bilateral salpingoophorectomies afterwards and no adjuvant therapy was needed.

Among all the 301 asymptomatic patients, the risk of incidental malignancy was 0.33% (n=1/301). Within the post-menopausal group of asymptomatic patients, the risk of incidental malignancy was 0.40% (n=1/249).

Interpretation of results

In the histopathological specimens of hysterectomy for uterine prolapse, 99.5% were benign within which 51.4% having no pathology found. Among those with pathology, leiomyoma was the most common findings in our study, which concur with other studies showing similar results. (1) The overall risk of malignancy in patients with uterine prolapse was 0.47%. The risk of incidental malignancy in both pre- and post-menopausal patients was 0.33% while that in post-menopausal patients was 0.40%, which also fall into the range of incidence rate of sporadic endometrial carcinoma quoted in other studies, ranging from 0% to 2.6%. (2,3) This figure would help us to give a proper counselling to patients on uterine preserving surgery for uterine prolapse.

Concluding message

Risk of missing uterine malignancy in patients of uterine prolapse is low. Uterine preservation in uterine prolapse surgery is a safe option.

Table 1.Incidence of pathologies of uterus and cervix

Malignant pathology	**Number (%) (N = 426)**
Endometrial carcinoma	2 (0.5%)
Pre-malignant pathologies	**Number (%) (N = 426)**
Complex hyperplasia without atypia	1 (0.2%)
Simple hyperplasia with atypia	1 (0.2%)
Disordered proliferative endometrium with atypia	1 (0.2%)
Cervical intra-epithelial neoplasia	2 (0.5%)
Dysplastic changes or atypia of cervix	3 (0.7%)
Subtotal of pre-malignant pathologies	**8 (1.9%)**
Benign pathologies	**Number (%) (N = 426)**
Leiomyoma	128 (30.0%)
Adenomyoma/ adenomyosis	43 (10.1%)
Endometrial polyp	24 (5.6%)
Endometritis	3 (0.7%)
Endocervical or cervical polyp	3 (0.7%)
Angiofibroblastoma of cervix	1 (0.2%)
Subtotal of benign conditions	**202 (47.4%)**

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