

## RECURRANCE PATTERNS OF CERVICAL CANCER AFTER RADICAL HYSTERECTOMY AND PELVIC LYMPHADENECTOMY AT SRINAGARIND HOSPITAL.

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### การกลับเป็นข้าหลังทำผ่าตัดรักษามะเร็งปากมดลูก ในโรงพยาบาลศรีนครินทร์

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ได้ศึกษาภาวะการกลับเป็นข้าหลังทำผ่าตัด  
รักษามะเร็งปากมดลูก ระยะที่ I และ II A โดยวิธี  
radical hysterectomy และเอาต่อมน้ำเหลืองของ  
อุ้งเชิงกรานออกตัวข โดยรวมรวมผู้ป่วยที่รับการ

ผ่าตัด ตั้งแต่ พ.ศ.2519 ถึงวันที่ 30 มิถุนายน  
2531 รวม 218 ราย พบว่า อัตราการกลับเป็น  
เป็นข้าของผู้ป่วยทั้งหมด 9.10%, เป็นผู้ป่วย  
ใน ระยะที่ IB, 8.40%, เป็นผู้ป่วยระยะ II A 19.40%

ในผู้ป่วยระยะ IA กลับเป็นซ้ำแลบ บริเวณที่กลับเป็นซ้ำพบบริเวณอุ้งเชิงกรานส่วนกลาง 45%, บริเวณอุ้งเชิงกรานรอบนอก 15%, ในช่องท้อง 15% และบริเวณไก่ลอกอีกไป 25% ลักษณะเซลล์มะเร็งที่พบในกลุ่ม squamous cell carcinoma พบกลับเป็นซ้ำ 9.09% และกลุ่ม adenocarcinoma 16.13% กลุ่นที่มีการกระจายไปต่อในน้ำเหลืองมีการกลับเป็นซ้ำ 15.20% และกลุ่นที่ไม่มีการกระจายมีการกลับเป็นซ้ำ 8.10% การรักษาและผลการรักษาในกลุ่มผู้ป่วยกลุ่มนี้จะได้นำเสนอต่อไป

**Recurrent patterns after radical hysterectomy and pelvic lymphadenectomy for cervical cancer stage I and II A were analysed. The data collected from 1976 upto June 30, 1988, with the total 218 cases operated. The incidence of recurrence in this series was 9.10%, 8.40% for stage I B, 19.40% for stage II A and no patient with stage I A recurred. There were 45% with central pelvic recurrences, 15% with pelvic sidewall recurrences, 15% with intraabdominal recurrences and 25% with distant recurrences. The recurrent rate in squamous cell carcinoma was 9.09% and adenocarcinoma 16.13%. Those who had positive lymph nodes recurred in 15.20% and those who had negative nodes recurred in 8.10%. The treatment after recurrence will be presented. x**

## INTRODUCTION

The recurrent cancer is defined as the tumor found after 3 to 6 months following therapy, while disease found within that time is often termed persistent disease.<sup>(1)</sup> It is also included those that later become evident after a period of complete clinical remission. Disease discovered after primary surgical approach should be termed persistent if margins or nodes were involved. Some authors defined the recurrence as tumor regrowth in cases in which no tumor was knowingly left behind, no time limit set.<sup>(2)</sup> Recurrences after radical hysterectomy with pelvic lymphadenectomy for stage IB and IIA varied from 10% to 20% in most institutes. Patients with negative nodes

at the time of radical hysterectomy have about 10% recurrence rate.<sup>(2)</sup> Despite postoperative whole pelvic radiation therapy in 88% of patients, 34.2% developed recurrence in Burke's series.<sup>(3)</sup> Also Burke and coworkers<sup>(4)</sup> reviewed the 31 cases with FIGO stage IB cervical carcinoma who developed recurrent disease after radical hysterectomy and pelvic lymphadenectomy. The overall incidence of recurrence was 11.3%. Sites of recurrence were central pelvis in 35%, pelvic side wall 39% and distant 26%. Patients treated with post-operative pelvic radiotherapy for positive pelvic nodes or surgical margin involvement were more likely to develop distant recurrence. High-risk factors are apparent in these patients. If tumor is present in vascular spaces, in the endometrial cavity, the deep endocervical stroma or the paracervical (cardinal ligament) tissue are invaded, if the tumor is undifferentiated or is 3 cm or larger in size, one may predict high recurrent rate. The disease-free interval depends also on the adequacy of initial treatment, host resistance, the original stage, volume of tumor and adequacy of follow-up.<sup>(1)</sup>

This study was to review the recurrent rate after radical hysterectomy and pelvic lymphadenectomy in Srinagarind hospital after 12-year experiences and to analyze risk factors for recurrence of cervical cancer for future planning and selection of patients.

## MATERIALS AND METHODS.

During 1976 to June 30, 1988, 218 cases of cervical cancer stage IA, IB and IIA were operated. The data from 1976 to 1983 were retrospectively collected from record books of the operative room, the department of pathology and the medical record unit. Since 1984, all records were collected prospectively by the Division of Gynecologic Oncology, Department of Obstetrics and Gynecology. The follow-up data were obtained from the gynecologic

oncology tumor clinic and the hospital-based cancer registration of The Cancer Unit, Faculty of Medicine. The operative technique performed in this hospital was class III extended hysterectomy due to Piver's classification<sup>(5)</sup> and the modified Okabayashi technique as mentioned by Sekiba.<sup>(6)</sup> Postoperative care was closely observed for any complications and prophylactic antibiotics were routinely given.

The patients were followed up at tumor clinic for the first time after 4 weeks postoperatively, then every 3 months for the first year and every 6 months for the whole life. Complete physical and pelvic examinations with Pap smear were done every time of follow-up. Recurrence was defined in this situation as any sign of disease appeared after 3 months. All recurrences were confirmed histologically or cytologically at the time of diagnosis of recurrence of which divided into 4 groups.

1. Central pelvic recurrences were those confined to the area of the vaginal cuff, bladder or rectum.

2. Pelvic side wall recurrences consisted of isolated tumor masses at the pelvic side wall and/or central recurrences with either extension to the side wall.

3. Intraabdominal recurrences included all tumor recurrences at intraperitoneal organs with or without ascites or evidence of ureteral obstruction on intravenous pyelography.

4. Distant recurrences included all tumor recurrences outside pelvic or abdominal cavity with or without pelvic involvement.

All recurrence cases were given radiotherapy with or without chemotherapy. Questionnaires would be sent to those who did not attend the tumor clinic or loss to follow-up.

The analysis of data was descriptive statistics and contingency tables with chi-square test. The analysis of disease-free

interval using Kaplan-Meier product limit estimation with log-rank tests. The censor date was June 30, 1988.

## RESULTS.

### Incidence of Recurrence.

From 1976 to June 30, 1988, 218 cases of cervical cancer stage IA, IB and IIA were operated at Sriinagarind hospital. Twenty recurrences (9.10%) were diagnosed, 16 cases of stage IB (8.40%) 4 cases of IIA (19.40%) and no single case of stage IA recurred at the time of censoring

### Sites of Recurrence.

Table 2 showed the sites of recurrence of cervical cancer, central pelvic recurrence were found in 9 patients (45.00%), pelvic side wall in 3 patients (15.00%), intraabdominal in 3 patients (15.00%) and distant recurrence in 5 patients (25.00%).

### Cell Types and Gradings.

Table 3 showed the cell types and gradings of the postoperative pathological reports, squamous cell carcinoma were found in 15 cases (75.00%) and adenocarcinoma in 5 cases (25.00%). Comparing to the total cases operated they were 9.09% and 16.13% respectively (Table 4).

### Lymph Node Status.

Of the 20 cases recurred, 15 cases were those who had no involvement of lymph nodes from the total of 185 cases (8.10%). Five cases were those who had positive nodes from the total of 33 cases (15.20%). There was no statistically significant difference between the two groups (Table 5).

### Disease-Free Interval.

Fig.1 depicted the disease-free interval of all sites of recurrence with the median disease-free time in days. Intraabdominal and pelvic side wall recurrences.

### Treatment after Recurrence.

Table 6 showed the modalities of treatment after recurrence at Srinagarind hospital, 7 cases were given radiotherapy alone, 3 case of chemotherapy, 3 cases of combination chemotherapy and radiotherapy and 6 cases of palliative treatment.

### DISCUSSION

The incidence of recurrence after radical hysterectomy and pelvic lymphadenectomy for stage I and IIA reported from many series varied from 10 to 20%.<sup>(4)</sup> Krebs et al<sup>(2)</sup> reported 12% for stage IB and 17% for stage IIA. The incidence of 9.10% for total cases of stage I and IIB, 8.40% for stage IB and 19.40% for stage IIA were comparable to those reports. At the early period, some stage IA cervical cancer were also performed radical hysterectomy together with simple hysterectomy. No recurrence found from both types of surgery.

The sites of recurrence after radical hysterectomy influenced the time of diagnosis, modalities of treatment and results. From Table 2 and Fig. 1, 9 patients had central pelvic recurrence and could be detected earlier with median disease-free time of 410.63 days (14 months). Those who had distant recurrences had longer disease-free time, this may due to delay in clinical and histological evidences. All intraabdominal recurrences had also short disease-free interval and could be detected within 3 years postoperatively. Nearly all recurrences could be detected within 4 years except one with stage IB disease who had left supraclavicular nodes involvement detected histologically 8 years after surgery. In most series 45 to 75% of recurrences were diagnosed within the first year and 70 to 90% within the first 3 years.<sup>(2)</sup> Physical examinations is the most common method of diagnosis in recurrence cases after radical hysterectomy. Van Nagell et al<sup>10</sup>

found 70% of recurrences had an abnormal pelvic examination at the time of diagnosis and no patient in this series was diagnosed by cytologic smear. Routine cytologic smear gives limited impact on early diagnosis of recurrence in cervical cancer, it could detected preclinical recurrences in less than 5% of the cases.<sup>(11-12)</sup> Frequent physical examinations with biopsy at the suspicious area is the most appropriate method of surveillance after radical hysterectomy and pelvic lymphadenectomy.

Of all 31 cases of recurrences from Burke's series<sup>(4)</sup>, 17.4% of recurrences were adenocarcinoma or adenosquamous carcinoma and 9.2% were pure squamous carcinoma. Krebs et al<sup>(12)</sup> reported 13% of squamous cell carcinoma, 8% of adenocarcinoma and 25% of adenosquamous carcinoma. From this study, recurrences of squamous cell carcinoma were 9.09%, adenocarcinoma 16.13% no recurrence from the two cases of adenosquamous cell carcinoma.

It is common practice in this hospital to give radiotherapy to those who had nodal metastasis, presentation of tumor at the surgical margin or parametrium. Of the 20 cases of recurrences, there were 8.10% of the negative lymph node group compared to 15.20% of the positive one without statistical significance. Most of the postoperative radiotherapy recurrences had distant recurrences which was comparable to that reported by others.<sup>(13)</sup> It was shown that postoperative radiotherapy for those high risk patients did decrease the rate of recurrence to that of the low risk group. In fact, the conclusion of the 1979 Annual Meeting of the Society of Gynecologic Oncologists and the report of Iversen et al<sup>(7)</sup> that there had been no clearly demonstrated advantage of postoperative high voltage irradiation following removal of pelvic lymph nodes, only increased number of complications. This should be followed in the near future

in this hospital while the suitable treatment are adapted and improved.

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