



21 DEC 1992

**SURVIVAL TIME AMONG PATIENTS WITH CERVICAL CANCER  
AFTER CONVENTIONAL TREATMENTS  
NATIONAL CANCER INSTITUTE  
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*มีผลออกวางใจ ๒๑/๑๒/๙๒*

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE  
(MEDICAL EPIDEMIOLOGY)**

**IN  
FACULTY OF GRADUATE STUDIES  
MAHIDOL UNIVERSITY**

1992

20954

Thesis Title Survival Time among Patients with Cervical Cancer after Conventional Treatments, National Cancer Institute, Bangkok, Thailand

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Date of Graduation 30 September B.E.2535 ( 1992 )

### ABSTRACT

The follow-up records of 1,026 patients with cervical cancer in various stages who were diagnosed and underwent treatment at National Cancer Institute during 1976 to 1980 were analyzed. The purpose of this study was to describe the survival time of patients with different pathological stages of cervical cancer after the conventional treatments. Median survival times and survival curves were used to evaluate and compare the survival among cervical cancer patients with different age groups, occupations, pathological cell types, and treatments.

The result showed that cervical cancer patients with stage 0, IA, IB, had very few deaths and most of them survived beyond 5 years of follow-up period.

Among patients with stage II cervical cancer the overall median survival time was 83.7 months. Response to treatment did not vary across age groups. The survival curve of squamous cell carcinoma showed the best survival prospect when compared to other cell types. The undifferentiated cell carcinoma and mixed cell carcinoma had median survival times of 22.4 months and 34.7 months respectively. Among various schemes of treatments, the combination treatments of radiotherapy followed by surgery had the highest median survival time of 79.12 months and showed the best survival

prospect when compared to those received radiotherapy alone and to those who received combination of radiotherapy followed chemotherapy. The result of time-dependent Cox regression analysis showed the statistically significant difference during the follow-up period before 66 months that the risk of death of the patients with stage II cervical cancer receiving combination treatment ( radiotherapy followed by surgery ) was only one-third the risk of death compared to the patients received radiotherapy alone after adjusting for age and pathological cell types (  $p$ -value = 0.006 ).

Among patients with stage III cervical cancer, the overall median survival time was 31.4 months, the younger age group of less than 36 years had the lowest response to treatments with the median survival time only 12.4 months. The age group 36-45 years had median survival time of 47.42 months while the age group of 46 years and over had the median survival time of 32.4 months respectively. The stage III squamous cell carcinoma had the highest median survival time of 38.6 months while undifferentiated cell carcinoma, adenocarcinoma and mixed cell carcinoma had median survival times of 28.8, 15.4, and 5.3 months respectively (  $p$ -value = 0.042 ). The patients with stage III who received radiotherapy alone had the median survival time of 41.7 months significantly higher than the patients who received the combination treatment of radiotherapy followed by chemotherapy which was 18.1 months. The risk of death of patients with stage III cervical carcinoma beyond 24 months of follow-up period after received combination treatment of radiotherapy followed by chemotherapy had 1.8 times higher risk of death when compared to those who received radiotherapy alone after adjusting for the effect of age and pathological cell types (  $p$ -value = 0.030),

The cervical cancer patients with stage IV had the overall median survival time of 16.8 months. The median survival times were 11.9, 10.9 and 9.2 months among age groups of less than 35 years, 35-45 years and over 45 years respectively. There were no difference in survival times among patients with squamous cell carcinoma and adenocarcinoma ( 9.82 and 9.25 months ). The group of patients who received treatment by radiotherapy showed statistically significant higher response to treatment with median survival time of 24.8 months. The median survival time among patients who received

combination treatment of radiotherapy followed chemotherapy was 8.67 months and those who received external radiation only was only 4.4 months. The risk of death during the period beyond 4 months of follow-up period among the patients who received external radiation alone was 4 times higher than the risk of death in the patients who received external and internal radiotherapy (  $p$ -value = 0.000 ), while the risk of death among patients who received combination of radiotherapy followed by chemotherapy was about 3.8 time higher than the risk of death in the patients who received radiotherapy alone after adjusting for the effect of age and pathological cell types (  $p$ -value = 0.000 ).

