Cervical Cancer in Elderly Thais

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Abstract

Background : Neoplasm is the second most common cause of death in Thai women and cervical cancer is the most common. The prevalence of cervical cancer in Thai elderly women is unknown. What is the optimum time for a regular Papanicolaou smear check up.

Method : A cross-sectional study of healthy elderly women (age $\geq$ 60 years) who lived within a 10-kilometer radius of Siriraj Hospital was carried out. All had their history taken and were examined by vaginal examination and Papanicolaou smear for cancer screening three times; on the day of enrollment, at one-year and two-years.

Results : Six hundred and eighty two women aged 60-88 years were recruited. There were 7 cases (1.0%) who had a positive Papanicolaou smear on the day of enrollment. Six cases (0.9%) had complete investigations : 2 cases (33.3%) had invasive cervical cancer stage III b, 4 cases had CIN III. There was one case out of 268 (0.4%) at one-year and one case out of 342 (0.3%) at two-years who had a positive Papanicolaou smear and the final diagnosis was CIN III.

Conclusion : The prevalence of cervical cancer in Thai elderly women in this study was 1 per cent. Thai elderly women need a yearly Papanicolaou smear check up.

Key ward : Elderly Women, Cervical Cancer, Papanicolaou Smear

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Rationale

Cervical cancer remains the most common cause of mortality from cancer in women worldwide (1). Boring(2) reported that the incidence of cervical cancer increases with age, with the mean age of diagnosis being 52.2 years and peak incidence occurring between 35 to 39 and 60 to 64 years of age. With a continuously rising incidence and mortality rates with advancing age, screening should continue for most women with no upper age limit. Over 25 per cent of the total number of invasive cervical cancers occur in women older than 65, and 40-50 per cent of all women who die from cervical cancer are over 65 years of age(3). Mortality has fallen when aggressive cervical Papanicolaou smear programs are put in place(4).

Neoplasm was the second most common cause of death in Thai women. In 1997 the death rate from this cause was 35(5). Cervical cancer is the most common cancer in Thai women. In 1991, the Ministry of Public Health started a health promotion program for early cervical cancer detection by Papanicolaou smear in women. At present there are many cases of invasive cervical cancer(6). The Ministry of Public Health(7) has reported that 1.4 per cent of Papanicolaou smears in postmenopausal women were abnormal.

In Thailand, the incidence of cervical cancer in all age groups was 20.9 per 100,000(8) but the prevalence of cervical cancer in elderly women is unknown. However, knowledge concerning cervical cancer in this group of women could lead to a decision about the optimum frequency of Papanicolaou smear check-up in order to produce a cost-effective program for its detection and early treatment.

The aims of this study was to determine the prevalence of cervical cancer and the optimum frequency of a regular Papanicolaou smear check-up in Thai elderly women.

MATERIAL AND METHOD

A cross-sectional study of healthy elderly women (age $\geq$ 60 years) who lived within a 10-kilometer radius of Siriraj Hospital during was carried out. All had a history taken and were examined by vaginal examination and Papanicolaou smear for cancer screening three times; on the day of enrollment, at one-year and two-years. All positive Papanicolaou smears underwent step by step investigations to achieve a final diagnosis by colposcopic biopsy and conization. In cases where the previous Papanicolaou smear was negative, the previous slides were reviewed to detect false negative results.

Exclusion criteria were; women who were single, and who had had a previous hysterectomy

RESULTS

From December 1997 to March 1998, 682 women aged 60-88 years were recruited. The mean age was 67.5 $\pm$ 5.8 years (Table 1). The mean age at menarche was 15.7 $\pm$ 1.8 (Table 2). Mean age at menopause was 48.0 $\pm$ 4.5 and the age at marriage was 21.7 $\pm$ 4.4 years (Table 3 and 4). Fifty three cases (7.8%) had never delivered and 273 cases (40.0%) had had 4-6 births (Table 5).

There were 7 cases (1.0%) who had a positive Papanicolaou smear. They were 61-75 years old. One case refused further investigation because she was symptomless. Two cases had medical disease; one diabetes mellitus and one pulmonary tuberculosis (Table 6).

Table 1. Age group.

Age	No.	%
60-65	300	44.0
66-70	190	27.8
71-75	126	18.5
$\geq$ 76	66	9.7
Total	682	100
Mean $\pm$ SD	67.5 $\pm$ 5.8	

Table 2. Menarche.

Age	No.	%
11	3	0.4
12	16	2.3
13	42	6.2
14	109	16.0
15	177	26.0
16	119	17.5
17	91	13.3
18	63	9.2
19	26	3.8
20	20	2.9
Unknown	16	2.4
Total	682	100
Mean $\pm$ SD	15.7 $\pm$ 1.8	

Table 3. Age at menopause.

Age	No.	%
≤ 40	88	12.9
41-45	136	19.9
46-50	284	41.6
51-55	145	21.3
≥ 56	25	3.7
Unknown	4	0.6
Total	268	100
Mean ± SD	48.0 ± 4.5	

Table 4. Age at first marriage.

Age	No.	%
≤ 14	12	1.7
15-19	216	31.7
20-24	293	43.0
25-29	111	16.3
30-34	33	4.8
≥ 35	13	1.9
Unknown	4	0.6
Total	682	100
Mean ± SD	21.7 ± 4.4	

Table 5. Number of children.

Number of children	No.	%
0	53	7.8
1-3	168	24.6
4-6	273	40.0
7-9	151	22.1
≥ 10	37	5.5
Total	682	100
Mean ± SD	5.2 ± 2.5	

Six cases (0.9%) had complete investigations : 2 cases (33.3%) had invasive cervical carcinoma stage III b, 4 cases had CIN III, of which 3 cases accepted hysterectomy and one accepted close follow-up without hysterectomy. There was one case out of 268 (0.4%) at 12-months and one case out of 342 (0.3%) at 24 months who had a positive Papanicolaou smear, and the final diagnosis were CIN III. They accepted hysterectomy (Table 7).

DISCUSSION

This was a prospective study of 682 elderly women aged 60-88 years old living within a 10-kilometer circumference of Siriraj Hospital. The mean age of this group was 67.5 ± 5.8 years. The age at menarche of this group who were born before 1937 was 15.7 years which is higher than found by Piya-Anant[9] who reported that the mean age of menarche of Thai girls who were born after 1967 was 12.3 years. This shows that girls nowadays have a menarche about 3.4 years earlier than girls over the past 30 years or more. The average age of menopause in this group was 48.0 ± 4.5 which was the same as that reported by Chomputavip[10], who reported that in 1992, the average age at menopause of Thai women was 49.5 ± 3.6 years.

The presented group was healthy symptomless women. There were 7 cases with a positive Papanicolaou smear on the day of enrollment, one women refused further investigation because she was symptomless. Six had a complete investigation; two (33.%) had invasive cervical carcinoma stage III b and the rest had CIN III. All 6 cases had their last Papanicolaou smear more than 10 years ago. This result confirms that of Stenkvist[11] who reported that the lack of Papanicolaou smear screening is the most common reason for nondetection of invasive cervical cancer at the earlier stages of disease. Celentano[12] reported that Maryland women with invasive cervical cancer had a history of never having visited the gynecologist and older age at first Papanicolaou smear.

Two of 8 cases (25%) had a comorbid condition : one diabetes mellitus and one pulmonary tuberculosis, resulting in delayed diagnosis and treatment. Mitchell[13] reported more frequent treatment breaks and less ability to undergo definitive treatment with intracavitary radiation therapy.

Of the 8 positive Papanicolaou smears; one case was diagnosed by colposcopic biopsy; the rest were diagnosed by conization, even one case of invasive cervical cancer stage III b. This shows that the diagnosis of cervical cancer in the elderly is difficult, because of fibrosis and atrophic changes of the cervix.

Dunn[14] reported that women with invasive cervical cancer had negative cytological findings within an average of 2.6 years of the diagnosis. One report[15] shows that the screening interval should be three years or less. In this study there was a prevalence of 0.9-1 per cent, 0.4 per cent and 0.3 per

Table 6. Positive Papanicolaou smear.

Patient	Age	Pap test	Medical disease
B.Ch.	67	SCC	-
P.Ch.	65	SCC	-
R.Ch.	61	SCC	Diabetes Melletus
N.Ch.	68	Some abn	-
S.M.	62	SCC	Pulm. T.B.
M.S.	61	SCC	-
P.S.	64	SCC	Unknown
A.G.*	63	SCC	-
R.Sh.**	75	SCC	-

* at 12-months
** at 24-months

Table 7. Final diagnosis.

Patient	Colposcopic biopsy	Conization	Final diagnosis
B.Ch.	CIN III	CIN III	CIN III
P.Ch.	CIN III	CIN III	CIN III
R.Ch.	Some SCC	SCC	Stag III b
N.P.	Invasive SCC	-	Stag III b
S.M.	Few SCC	CIN III	CIN III
M.S.	CIN III	CIN III	CIN III
A.G.*	CIN III	CIN III	CIN III
R.Sh.**	CIN III	CIN III	CIN III

* at 12-months
** at 24-months

cent of cervical cancer at enrollment, one year and two years repectively. This shows a high prevalence of cervical cancer which indicates that elderly Thai women need a yearly Papanicolaou smear check-up.

SUMMARY

This was a study of 682 Thai elderly women who lived within a 10-kilometers radius of Siriraj Hospital and having had their last Papanicolaou smear check-up more than 10 years ago. Mean age at menarche was 15.7 $\pm$ 1.8 years, mean menopausal age was 48.0 $\pm$ 4.5 years. The prevalence of cervical cancer was 0.9-1.0 per cent. After one and two years follow-up there was an incidence of 0.4 per cent and 0.3 per cent of cervical carcinoma in this group. Diagnosis of cervical cancer in the elderly was difficult even with the invasive type. Elderly women need a regular yearly Papanicolaou smear check-up.

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มะเร็งปากมดลูกในหญิงไทยสูงอายุ

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มะเร็งปากมดลูก เป็นสาเหตุการตายลำดับสองของหญิงไทย จากการศึกษาผู้สูงอายุ 682 ราย อายุ 60–88 ปี ที่อาศัยอยู่ในเขต 10 กิโลเมตรรอบโรงพยาบาลศิริราช พบว่า 7 ราย คิดเป็นร้อยละพบมีเซลล์มะเร็งปากมดลูกจากการตรวจ Pap smear ในจำนวนนี้ 6 ราย ดำเนินการตรวจต่อพบว่าเป็นมะเร็งปากมดลูก ซึ่งหนึ่งในสามเป็นระยะลุกลาม ผู้ป่วยทุกรายไม่ได้ตรวจมะเร็งปากมดลูกมานานกว่า 10 ปีแล้วจากการตรวจซ้ำเมื่อครบหนึ่งปีและสองปี พบเซลล์มะเร็งปากมดลูกร้อยละ 0.4 และ 0.3 ตามลำดับ และเมื่อดำเนินการตรวจต่อก็พบว่าเป็นมะเร็งปากมดลูกเช่นกัน การวินิจฉัยมะเร็งปากมดลูกในผู้สูงอายุทำได้ยาก แม้แต่ในรายเป็นมะเร็งปากมดลูกระยะลุกลาม ต้องวินิจฉัยโรคเพิ่มเติมโดยใช้กล้อง Colposcope และการตัดปากมดลูกเป็นรูปกรวย หญิงไทยสูงอายุควรตรวจค้นหามะเร็งปากมดลูกปีละครั้ง

คำสำคัญ : ผู้สูงอายุ, มะเร็งปากมดลูก, การตรวจ Pap smear

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