The characteristics of cervical cancer patients who underwent a radical hysterectomy at Sanglah Hospital Denpasar in 2015

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ABSTRACT

Background: Cervical cancer is the most common gynecologic cancer in women. It is the main cause of cancer-related death in women in developing countries. Cervical cancer in Indonesia is the second most cancer affecting Indonesian women and the prevalence is relatively stable in the last 30 years. Cervical cancer was closely related to the histologic type of itself. A squamous cell carcinoma has a specific route of local spreading and a lymphatic route. The sample of this study are cervical cancer patients who underwent a radical hysterectomy from January 1 to December 31, 2015 in Sanglah Hospital Denpasar, Bali. The aim of this study is to discover the characteristics of the patients by age, parity, education level, marital status, sexual activity, the first symptoms and the early screening done, and the clinical staging.

Methods: This descriptive study involved 20 patients in Sanglah Hospital Denpasar who had a radical hysterectomy from January 1 until December 31, 2015. The characteristics are gathered from the patients' medical record.

Results: The most cases done radical hysterectomy between 41-45 years old which proportion was 40%, the most parity was parity 2 (60%), elementary school was the most education level (35%), all of the samples only married once and sexually active, the most first symptom was vaginal bleeding (55%), only 10% had pap smear as early detection, and the most clinical stage was stage IIB (50%).

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INTRODUCTION

Cervical cancer is the most common gynecologic cancers in women and is the main cause of cancer-related-death in women in developing countries. The incidence trend is increasing every year. This condition is related to the late diagnosis, the restricted human resources, the low level of education and knowledge of the patients, and also the scarce health facilities. Based on *Globocan*, the International Agency for Research on Cancer (IARC) estimates the incidence of the cervical cancer in 2012 was 17 per 100.000 women.[1]

Cervical cancer early stage incidence in Indonesia from 2000 to 2015 for stage IA1, IA2, IB1, IB2, IIA1, IIA2 were 0.6%; 0.2%; 7.5%; 4.2%; 7.9%; 1.5% respectively.[2]

The prognostic of the cervical cancer is closely related to the histology. Squamous cell carcinoma is the most common type of cervical cancer. It can spread locally and through the lymphatic route. To achieve an optimal 5-years survival rate, a radical hysterectomy and a pelvic lymphadenectomy are the suggested therapy for the early stage of a cervical cancer. Another treatment modality is chemoradiation (concurrent chemoradiation/ CCRT). However, the number of radiotherapy machine in Indonesia is very limited.[3] Sanglah Hospital Denpasar has only one cobalt machine. It limits the hospital from delivering a radiotherapy treatment for many cancer patients. Thus, to increase the survival rate, a radical hysterectomy and pelvic lymphadenectomy become the mandatory treatment of early stage cervical cancer in this hospital.

The data collected in this study will provide the characteristics of the cervical cancer patient who had a radical hysterectomy and a pelvic lymphadenectomy in Sanglah Hospital Denpasar. Our aims are to provide a primary data for a possible improvement in the mandatory therapy for the future cervical patients, and as a pilot study for a more advance research related to cervical cancer.

PATIENTS AND METHOD

A total of 26 patients had a radical hysterectomy between January 1, 2015 and December 31, 2015. The histopathology results were available for the 26, so that we include the proportion of patients based on the clinical staging. However, the medical record of 6 patients lost, thus they were excluded from the characteristics tabulation. From the 20 medical records, the data of the age, the parity, the education level, the marital status, the sexual activity, the

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first symptoms, the recorded early screening, and the clinical staging of cervical cancer, are tabulated.

RESULTS

The frequency of the patients and the proportion based on the age, the parity, the education level, the marital status, the sexual activity, the first symptoms, the recorded early screening, and the clinical staging of cervical cancer, are shown in Table 1. The

Table 1 **Cervical Cancer Patient Characteristics**

Variables	Descriptive Categories	Total (%)	Variables	Descriptive Categories	Total (%)
Age (years old)	26-30	2 (10)	Parity	1	1 (5)
	31-35	2 (10)		2	12 (60)
	36-40	2 (10)		3	3 (15)
	41-45	8 (40)		4	3 (15)
	46-50	2 (10)		>4	1 (5)
	51-55	1 (5)		Total	20 (100)
	56-60	3 (15)	Early Detection	IVA	0 (0)
	Total	20 (100)		Pap smear	2 (10)
Sexual Activity	Sexually Active	20 (100)		Colposcopy biopsy	0 (0)
	Total	20 (100)		None	18 (90)
First symptom	Contact Bleeding	5 (25)		Total	20 (100)
	Vaginal Bleeding	11 (55)	Educational Level	Elementary School	7 (35)
	Leuchorrhea	4 (20)		Junior High School	6 (30)
	Total	20 (100)		Senior High School	5 (25)
Marital Status	Married 1x	20 (100)		Diploma/Bachelor	2 (10)
	Total	20 (100)		Total	20 (100)

Table 2 **The Clinical Staging of the Cervical Cancer Patient Who Had a Radical Hysterectomy**

Descriptive Categories	Total (Percentage)
IA1	0 (0)
IA2	0 (0)
IB1	3 (11,6)
IB2	4 (15,3)
IIA1	2 (7,7)
IIA2	3 (11,6)
IIB	13 (50)
IIIB	1 (3,8)
Total	26 (100)

clinical staging of the cervical cancer patients who had a radical hysterectomy is show in Table 2.

DISCUSSION

Based on Hacker and Vermoken, the majority of the cervical cancer is diagnosed between the age of 35 to 55, with only 0.2% of the cases is diagnosed in under 20. The epidemiology is related to the natural history of the etiology: the Human Papilloma Virus (HPV), with their various types. Not all of the HPV infection will progress to an invasive cancer. Many factors influence HPV invacifity, i.e. the HPV type, the host immunology status and the predisposition factors such as the first sexual intercourse before the age of 16, a multiparity, and a multipartner sexual intercourse.[3]

The parity is not the cause of the cervical cancer, but it is a risk factor for HPV infection. Vaginal delivery may cause cervical microtrauma, which may increase the likelihood of HPV infection.[4,5] The education level is suggested to be related to the likelihood of the person to have an early detection. A good early detection must start at the age of 21 or earlier if the first sexual intercourse is before a woman reach 21. Pretorius et al. in his research states that proportion of cervical cancer patient visited a hospital for the first time because of an abnormal pap smear result is only about 28%.[3,6,7]

The marital status and sexual activity are related to the patient complaint or first symptom. A study shows 56% cervical cancer patients came to the hospital with a complain of vaginal bleeding and 4% with leuchorrhea.[3]

The clinical staging is often inaccurate in defining the extent of the disease. The Gynecologic Oncology Group (GOG), in a study of 290 patients with surgically staged cervical cancer, reported errors in FIGO clinical staging ranging from 24% in stage IB to 67% for stage IVA disease. Most patients were upstaged on the basis of surgical exploration, with the most likely sites of occult metastases being the pelvic and para-aortic lymph nodes. Other sites of occult disease were the parametrium, peritoneum, and omentum. As many as 14% of patients may be downstaged, typically because a benign pathologic process was discovered, such as pelvic inflammatory disease, endometriosis, or fibroids.[3,5,8]

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