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Clinicopathological patterns of cervical carcinoma in pathological anatomy laboratory at RSUP Sanglah Denpasar, Bali since 2012-2016

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ABSTRACT

Background: Carcinoma of the cervix is the second most common cancer in women worldwide, Cervical cancer is the most common cancer in women in developing countries. Cervical cancer is the fourth most common cancer in women overall, with an estimated 528,000 new cases in 2012. According to the data clinicopathology of cervical cancer in Bali its still in a small amount.

Aims: To obtain information about clinicopathology of cervical carcinoma from the year 2012 – 2016.

Methods: A descriptive design study is conducted to determine the clinical pathology profile of cervical carcinoma among patients in Sanglah Hospital, Denpasar, Bali in the year 2012 – 2016. Medical records of the patients were used as the secondary data for this research. This research used the histopathologic document that available in Pathological Anatomy at RSUP Sanglah which mainly reports about patient condition starting from the early anamnesis period until the exact diagnosis of the patient which is due to the laboratory examination or other.

Result and Conclusion: As of 2012 to 2016, there were 142 cases of cervical cancer patients in RSUP Sanglah.The age group of 41-50 years has the highest number of patients in the year 2012 – 2016 which is about 52 patients. Abnormal vaginal bleeding is the most common clinical finding of cervical cancer patients from the year 2012- 2016 and carries 53% in 142 cases. It is found out that the most common histopathologic type of cervical cancer from the year 2012 – 2016 is squamous cell followed by adenocarcinoma in the list.

Keywords: cervical cancer, carcinoma, cervical histopathology

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INTRODUCTION

World's attention to noncommunicable diseases (NCDs) has been increasing for the past several years. NCDs are the synonym of chronic diseases, which are not passed from person to person but are prolonged in duration and slow in progression. There are four main types of NCDs including cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. Among them all, cancer is the second leading cause of death behind cardiovascular disease.

Cervical cancer is the most common cancer in women in developing countries. Cervical cancer is the fourth most common cancer in women overall, with an estimated 528,000 new cases in 2012. As with liver cancer, a large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers. High-risk areas, with estimation over 30 per 100,000, include Eastern Africa (42.7), Melanesia (33.3), Southern (31.5) and Middle (30.6) Africa. Rates are lowest in Australia/New Zealand (5.5) and Western Asia (4.4). Cervical cancer remains the most common cancer in women in Eastern and Middle Africa.[1]

There were an estimated 266,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths. Almost nine out of ten (87%) cervical cancer deaths occur in the less developed regions. Mortality varies 18-fold between the different areas in the world, with rates ranging from less than 2 per 100,000 in Western Asia, Western Europe, and Australia/New Zealand to more than 20 per 100,000 in Melanesia (20.6), Middle (22.2) and Eastern (27.6) Africa. The incidence of cervical cancer in Bali is 7/100,000. There has already been a substantial increase in the number of Papanicolaou tests (PT) from 767 in 1990 to 1,355 in 1992.[2]

Cervical cancer results from genital infection with HPV, which is a well-known human carcinogen. Although HPV infections can be transmitted via nonsexual routes such as skin contact, the majority result from sexual contact. Consequently, major risk factors identified in epidemiologic studies are as follows: Sex at a young age, multiple sexual partners, promiscuous male partners and history of sexually transmitted diseases. HIV infection is associated with a 5-fold increase in the risk of cervical cancer, presumably because of an impaired immune response to HPV infection. Exposure to diethylstilbestrol in utero has been associated with an increased risk of CIN grade 2 or higher.[3]

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Irregular cervical cell changes infrequently indicate the causes. However, you may have side effects if those cell changes develop into cervical malignancy. Side effects of the cervical disease may incorporate seeping from the vagina that is not ordinary, for example, seeping between menstrual periods, after sex, or after menopause, pain in the lower gut or pelvis, pain amid a sex and vaginal release that isn't normal. As part of a pelvic exam, you ought to have a Pap test. Amid a Pap test, the specialist rubs a little example of cells from the surface of the cervix to search for cell changes. If a Pap test indicates notable cell changes, your specialist may do different tests to search for precancerous or malignancy cells on your cervix. Cervical growth analyzed as stage IV infection is regularly recognized from an unusual pelvic examination or manifestations delivered by the patient's disease. Taking after an arranging assessment of cervical tumor, a phase IV malignancy is said to exist if the growth has stretched out past the cervix into nearby organs, for example, the rectum or bladder (organize IVA), or the disease has spread to inaccessible areas in the body which may incorporate the bones, lungs or liver (stage IVB). Cervical tumor analyzed in this stage is frequently hard to treat, and a little minority of patients are cured of sickness.[4] Based on the explanation above this study aimed to know that clinical pathology of cervical cancer is very important for us to research this cancer. The knowledge of this cancer is still very little among people nowadays. Therefore an analysis regarding the clinicopathology of cervical cancer will be done to obtain more information about it.

METHODS

The study is a descriptive design to determine the clinical pathology of cervical carcinoma among patients in Sanglah Hospital, Denpasar, Bali. Medical records of the patients were used as the secondary data for this research. The advantage of this study usually takes a short time for completion and its applicability to rare diseases. The sample population of this study is people diagnosed from cervical carcinoma in Pathological Anatomy Laboratory at RSUP Sanglah Hospital from 2012 – 2016. Cervical carcinoma is referred to as stage 0 cervical cancer. It's noninvasive, which means the cancerous cells are confined to the surface of your cervix and haven't penetrated more deeply into the tissues. This research used the histopathologic record that available in Pathological Anatomy at RSUP Sanglah which mainly reports about patient condition starting from the early anamnesis period until the exact diagnosis of the patient which is due to the laboratory examination or other.

Protocol or procedure of this research is divided into the component which is the preparation stage, the implementation stage, and analysis stage.[5] In the preparation stage, the research proposal is made together with a recommendation letter to be sent to R&D for collecting data. The letter is submitted for approval of ethical clearance. Upon filing ethical clearance, the preparation proceeds for authorization from Director Utama RSUP Sanglah. Implementation stage is carried out upon approval from Director RSUP Sanglah to carry out the research. In this stage, the medical record of patients with cervical cancer is taken down based on the criteria and analyzed of the sample. Analysis stage is carried out after collecting the medical records. After the analysis, the final arrangement of the report is conducted until it's finished.

RESULTS

This research discusses the clinicopathological characteristics of patients with cervical cancer through the data in the Installation Medical Record Sanglah Hospital Pathology Denpasar from the year 2012 to 2016 which were obtained through medical records. The characteristics of the subjects of the clinical finding and histopathologic type of the cancer are discussed descriptively.

Based on table 1, the number of cervical cancer patients from the year 2012 to 2016 in the age group of fewer than 20 years is 3 people, in the age group 21 - 30 years is 8 people, in the age group 31 – 40 years is 28 people, in the age group 41 – 50 is 52, in the age group 51- 60 is 32, in the age group 61 – 70 is 9, and in the age group more than 71 is 10. Most cervical cancer patients were in the age group of 41- 50 years from the year 2012 to 2016, which is 52 patients out of 142 patients.

From those 142 cases, it is found that 53 women had abnormal vaginal bleeding, 43 had pain during sex, 32 had unusual discharge from vagina while another 6 had other symptoms such as pain in lower belly or pelvis and feeling weak. The remaining 8 had none of the symptoms. Based on the data, most cervix patients had abnormal vaginal bleeding as it carries the most number in the year 2012- 2016.

Out of 142 women who had cervix cancer 60 had a squamous cell, 44 had adenocarcinoma, and 38 had another type of histopathologic cells such as adenosquamous carcinoma and carcinoid. Based on the data, the most common histopathologic type of cervical cancer from the year 2012 – 2016 is a squamous cell which is 60 out of 142 patients.

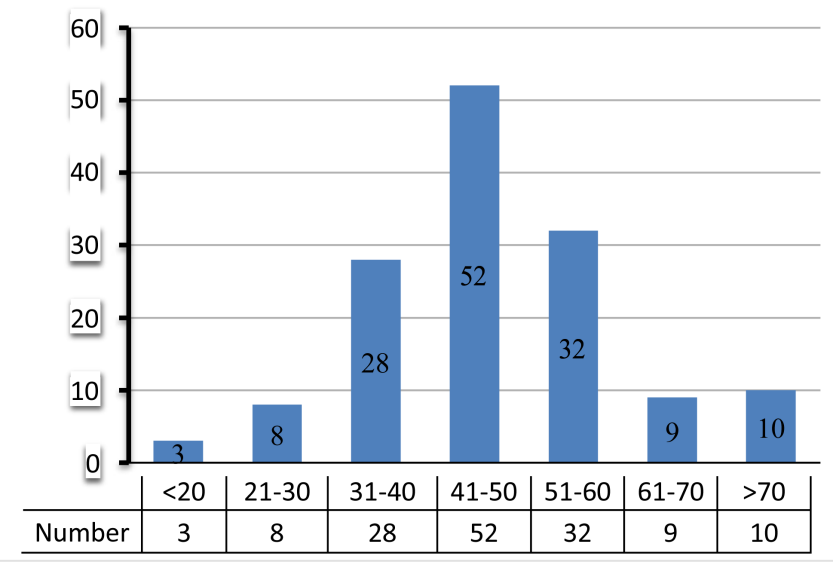

Figure 1 The age range of cervical cancer patients from the year 2012 - 2016

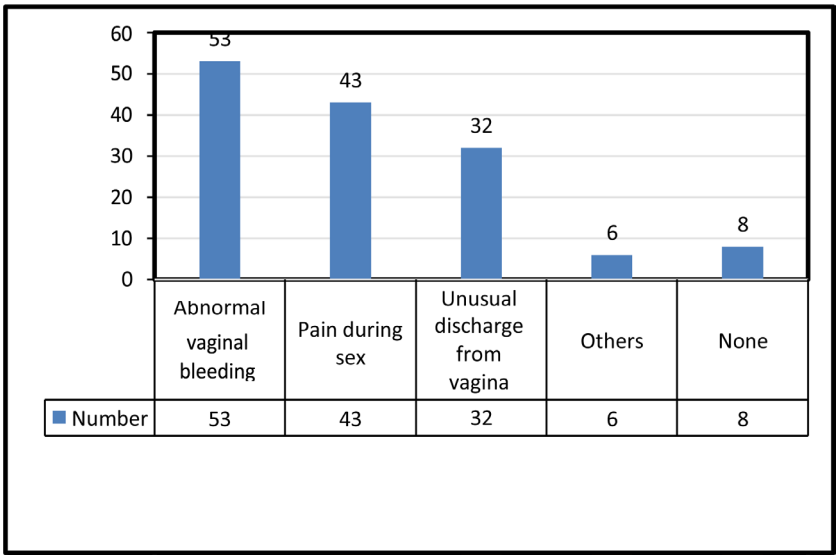

Figure 2 Clinical Findings of cervical cancer patients

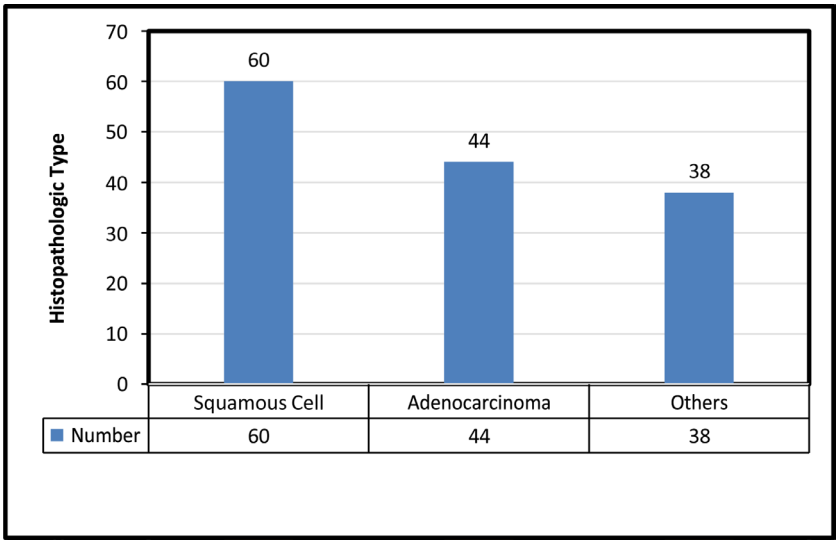

Figure 3 Histopathologic type of cervical cancer patients

DISCUSSION

Based on this study, most of the cervix cancer patients were in age group cases of 41 – 50 years, in the year 2012 – 2016. According to sources in countries such as Eastern Africa and Western Africa patients with age range 31- 40 years were most likely have the higher records. However, the study shows that in South America patients within the age range 21-30 were very common and found that the average age range of patients with cervical cancer in Canada is 40-49 years. This is in accordance with the findings of this study.[6]

This study shows cervical cancer in Denpasar tends to be higher among the middle age groups. This is mostly because it less to screen older women for cervical cancer, because of changes in the cervix after menopause, some women do not continue to get screened for cervical cancer as they get closer to 60 years old Or it could be because those studies are related to the older women have a lower risk. However, the impact of age on survival of patients with cervical cancer remain uncertain.[6]

In this study, it is found that most common clinical findings of cervical cancer is abnormal vaginal bleeding, as many as 53 out of 142 cases. Based on research conducted on the incidence of Study conducted in America large number of patients had abnormal vaginal bleeding.[2] Another study found that abnormal vaginal bleeding carries large numbers of patients in South Africa. These findings are similar to and thus, supporting the findings obtained from this study.[7] It is clear that abnormal vaginal bleeding is like the first and clear symptoms of cervical cancer. Vaginal bleeding or usually it is called postcoital is a significant symptom in a woman with cervical cancer. Abnormal vaginal bleeding in women who are ovulating regularly, most commonly involve excessive, frequent, irregular, or decreased bleeding and this occurs because cancer has spread to nearby tissue.[8]

In this study, it was found that the most patient is with squamous cell carcinoma. A case-control study on the most common type of histopathologic type of cervical cancer in 131 cases, recorded that 70% of their study subjects were a squamous cell.[7] Another survey of the risk factors for cervical cancer in Japan, involving 102 noted that almost 80% of the results are a squamous cell as the most common histopathologic type of the cervical cancer patients. This is consistent with that obtained in this study.[9]

CONCLUSION

As of 2012-2016, there were 142 cases of cervical cancer patients in RSUP Sanglah. The age group of 41-50 years has the highest number of patients

in the year 2012 – 2016 which is about 52 patients. Abnormal vaginal bleeding is the most common clinical finding of cervical cancer patients from the year 2012- 2016 and carries 53% in 142 cases. It is found out that the most common histopathologic type of cervical cancer from the year 2012 – 2016 is squamous cell followed by adenocarcinoma in the list.

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