

Conference Paper

Stomatitis Aphthosa Rekurent (SAR) in Menstruating Women at the Djafar Harun General Hospital, North Kolaka Regency, SE Sulawesi, Indonesia

Samsul¹, Ramadhan Tosepu^{2*}, Devi Savitri Effendy²¹Student of Postgraduate Program of Public Health, University of Halu Oleo, Indonesia²Faculty of Public Health University of Halu Oleo, Southeast Sulawesi Province, Indonesia**Abstract.**

Stomatitis Aphthosa Rekurent (SAR), also known as repeated thrush canker sores or cancer pain, is an oral disorder that commonly happens. SAR is characterized by spontaneous recurrence of painful ulcers in the oral mucosa area. The SAR highest prevalence is in the age range of 20-29 years, comprising 36.28% of all cases. Compared to men, SAR commonly happens to women. This statement is supported by previous research that found the majority of patients was women 55.4%, while men patients only comprise 44.6%. There are several caused of SAR such as heredity, imunodisregulasi, certain foods, stress, hormonal disorders, trauma, infections, drugs, smoking, and bad oral hygiene. Most SAR patients are between 26-35 years old. It is found in the literature that incidence of SAR might potentially happen in the third decade of life. On this survey, the results showed that there is relations between the risk of Stomatitis Aphthous Rekurent (SAR) and the menstruation cycle in women of childbearing age.

Keywords: Stomatitis Aphthosa Rekurent, Djafar Harun General Hospital, North Kolaka Regency.

1. INTRODUCTION

Woman's body preparation process for pregnancy each month called the menstruation cycle. It is consists of several cycle are: menstrual (1-5 days), follicular/proliferative (5-15 days), and secretory/luteal (15-28 days) hormonal. It changes in every stage of menstrual cycle. The changes in hormonal soft tissue in the mouth affects to oral cavity. It is sensitive towards the changes in steroid hormone in a woman's blood [1], [2].

The acronym of Stomatitis Aphthous Rekurent (SAR) which is famous as recurrent thrush canker sores or cancer pain is oral disorder that commonly happens. SAR is characterized by spontaneous resolution of repeated painful ulcers in the oral mucosa area. Single or multiple SAR has an erythematous halo that appears usually on the

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mucous membranes of the lips, cheeks, tongue laterally and ventrally in the oral cavity. It is classified into three depending on the size: minor mouth ulcers, major mouth ulcers, and herfetiiform ulcers [3].

The SAR prevalence in the world population is varies from 5% to 66% with average 20%. The highest prevalence happens to the students in the North America, mostly on examinations seasons, and to the high class society. Stomatitis Aphthosa Rekurent is rare in Arab Bedouins. A study in 2007 toward 33,994 subjects that conducted by Chattopadhyay et al in the United States showed that 351 subjects had SAR. Mostly happens on the patient ages of 10 and 40 especially women and high class economic person. The previous study showed that 51 patients diagnosed SAR, 22 (43%) male, 29 (57%) female, and mostly patients were 94%. I have been diagnosed with mild gastritis. All reported SAR cases, 75-80% are mild, 10-15% major, and 5-10% thrush cases [4].

There is 36.28% of age of 20-29 years is the highest prevalence. According to the gender, SAR is more common happen to women than men. It is supported by the previous research that found the number of SAR patients was 55.4% women and 44.6% men.

Symptomatic treatment is needed because of unknown SAR etiology. There are some factors that make SAR happens possibly are heredity, immunodysregulation, certain foods, stress, hormonal disturbances, trauma, infections, drugs, smoking, and bad oral hygiene. The previous study is compared between 705 patients suffering SAR showed that the first and the most caused factor was stress with 386 patients (54.8%). The second is malnutrition with 176 patients (25%).

2. METHOD

There are 15 sub-districts, 6 sub-districts and 127 villages in Kolaka with area 3.391.67 km² and population 150.831 people. 77.796 are men and 73.055 are women with women of childbearing age are 24.345 people.

Based on the women of childbearing age data which held on this study uses various data from the Indonesian government. The SAR cases data collected from the North Kolaka District Health Office from 2018 to 2020. The data was taken from the annual health report published by the North Kolaka District Health Office. Research results are presented as follow:

3. RESULTS

a. Data on dental clinic patient visits at Djafar Harun Hospital by Gender for the last 3 (three) years

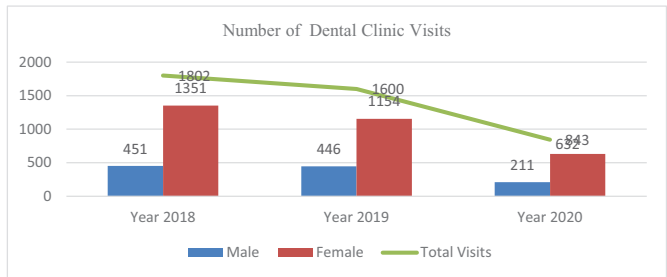


Figure 1: Source: Medical Records of Djafar Harun Hospital, North Kolaka Regency.

The diagram showed the incidence of SAR is dominated by women than men

b. Data on dental clinic patient visits at Djafar Harun Hospital by Age for the last 3 (three) years.

Sources: Medical Records of Djafar Harun Hospital, North Kolaka Regency

The picture above explained the highest cases of stomatitis aphthous rekurent (SAR) is on the age 26-35 years old.

c. Women of childbearing visits data with SAR cases for the last three years

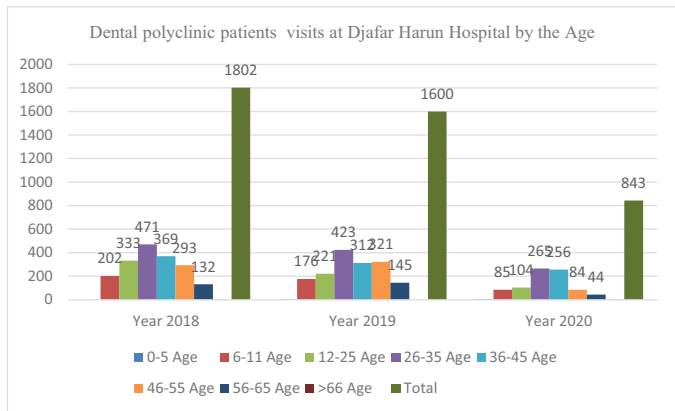


Figure 2: Sources: Medical Records of Djafar Harun Hospital, North Kolaka Regency.

The picture showed that the cases of Stomatitis Aphthous Rekurent (SAR) approximately 338 (25.03%) in 2018, 531 (46.01%) in 2019 and an increase of 211 (33.38%) in 2020, but overall visits were reduced due to the impact of the COVID-19 pandemic that happen in women of childbearing age with the menstruation cycle.

4. DISCUSSION

The SAR patients that found in this survey is mostly 26-35 years old. It is based on literature that stated that SAR will increase as same as ages on the third decade. It is rarely found the SAR patient above 35 years old. It is related with the literature state that SAR happens mostly less than 36 years old. SAR mostly happen in the mucosa labial area [5], [6].

The SAR happens commonly in the mucosa labial area because the mucosa structure is thin and potentially getting trauma. In this survey the minor SAR is dominantly found out. It is based on literature that showed minor SAR is the one commonly happen [7]–[9]

Other SAR predisposition factors are genetic, trauma, medicine, allergy, systemic illness, and stress. One factor brings impact to another predisposition factor such as menstruation cycles that lead sex hormone change on each phase [7].

The oral mucosa is sensitive to changes in steroid sex hormone levels due to the presence of steroid sex hormone receptors in the oral cavity. One of the manifestations of these hormonal changes in the oral cavity is SAR. Menstruation cycle is one of the predisposing factors of SAR. The cycle consists of several phases, namely the menstrual, the follicular/proliferative, and the secretory/luteal [10], [11].

5. CONCLUSION

Stomatitis Aphthosa Rekurent (SAR) is commonly happens in women than men. Almost a third patient visits dental clinic is female due to Stomatitis Aphthosa Rekurent (SAR) that arising from the menstrual cycle. The hypothesis that can be made is that there is a relationship or risk of Stomatitis Aphthosa Rekurent (SAR) with menstruation cycles for women of childbearing age.

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