



INCIDENCE OF ORAL ULCERS ACCORDING TO LOCATION & SEVERITY: STUDY OF 30 CASES REPORTED TO PRIVATE CLINIC DURING SPAN OF 5 YEARS.

Medical Science

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ABSTRACT

Objective: To assess incidence of oral ulcers according to location & severity.

Methodology: The data for this survey was collected from 30 patients reported to a private clinic during 2013 to 2018. Demographic data and data assessing oral health will be collected from each subject in single appointment. Locations of oral ulcers were noted down in data sheet along with other soft tissue findings. Size, borders & associated pain were noted down in examination sheet. Ulcers were classified according to severity according to their size, borders & associated pain. Size of the ulcer & pain associated checked for clinically significance. All data was tabulated to draw conclusion.

Results: The data was analyzed from 30 subjects. 70% of affected patients were females. The findings suggested that most common location for oral ulcer noted was buccal mucosa. Right buccal mucosa was affected more as compared to left buccal mucosa. Other predominant locations were lateral border of tongue & lip in decreasing order of severity. Size of the ulcers were ranging from 4mm to 12 mm with mean size as 7mm. Mucosa adjacent to ulcer was erythematous in 19 cases, normal colored in 8 and of grey colored in 3 cases. Average pain associated with ulcer was 7 as measured on VAS by subject. Size of the ulcer & pain associated found to be clinically significant.

Conclusion: Oral ulcers are more predominant on cheek followed by tongue & lips. Severity of pain varies directly in accordance to size of the ulcer.

KEYWORDS

oral ulcers, mucositis

INTRODUCTION:

An ulcer is a breach in the integrity of the covering epithelium. Traumatic ulceration is common in the oral cavity. For relatively common conditions such as recurrent herpetic vesiculoulcers and aphthous ulcers, presumptive diagnoses are often made without recourse to laboratory tests. The most frequent cause is mechanical injury from the teeth; such ulcers occur on the buccal mucosa, lateral tongue and lower lip in the occlusal plane. Ulcers at other sites can be caused by habits or even deliberate self-harm. Ill-fitting dentures may also cause traumatic ulceration. Sharp foodstuffs may cause traumatic ulceration of the palate. Thermal injuries are common at this site from over-hot drinks. Ulcers occur in the mouth with considerable frequency. Traumatic lesions usually resolve rapidly and are not seen by clinicians. While the diagnosis of some types of oral ulcers is facilitated by their association with constitutional signs and symptoms or lesions on the skin and/or other mucous membranes, ulcers which are localized to the oral cavity may be more difficult to identify. On clinical examination, traumatic ulcers typically are painful and surrounded by erythema. The base is covered by fibrinous exudate and at a later stage by granulation tissue and regenerating epithelium.

MATERIALS AND METHODS:

The data for this survey was collected from 30 patients local examination sheets recorded at a private clinic during 2013 to 2018. Demographic data and data assessing oral health will be collected from each subject in single appointment. Local examination of the ulcers was done by single investigator. Locations of oral ulcers were noted down in data sheet along with other soft tissue findings. Size of the ulcer was measured in mm by vernier calipers. All measurements were taken by single examiner. Borders of the ulcer were examined in standard dental chair light by single examiner. All patients were given VAS score sheet to grade the pain associated after the examination. Ulcers were classified according to severity according to their size, borders & associated pain. Size of the ulcer & pain associated checked for clinically significance. All data was tabulated to draw conclusion.

RESULTS:

Table: Shows Age wise Distribution.

SEX	Frequency	%
Male	9	30
Female	21	70
Total	30	100

Figure: Shows Age wise Distribution.

Of all the study samples 21(70%) were males and 9(30%) were females. It means the percentage of females were more than double of males.

Table: Shows size of the ulcer

Ulcer size (mm)	Mean	N	Std. Deviation	Std. Error Mean
	7	30	1.32	0.27292

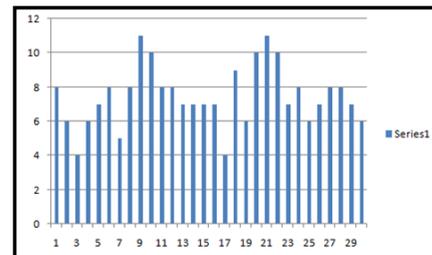


Figure: Shows the size of the ulcer

Here we can see that mean, Standard deviation (SD), Standard Error of Mean (SEM) of size of the ulcer. Mean was 7 mm with SD was 1.32 and SEM was 0.27292.

Table: Shows Correlation between size & pain associated

	N	Correlation	Sig.	Inference
Mucosal ulcer size & Pain associated	30	0.476	0.007	Significant

In above table we can conclude that on correlation coefficient $r = 0.476$ and p -value = 0.007. It seems there is an significant association between size & pain associated.

Hypothesis:

H0: No significant difference between size of ulcer & Pain associated at 95% Level of Significance.

H1: Significant difference between size of ulcer & Pain associated at 95% Level Of Significance.

DISCUSSION:

According to this study, incidence of mucosal ulcers was more in females as compared to males.

The possible explanation for this difference can be attributed to malnutrition & prevalence of iron deficiency which is more prevalent in Indian females. Need for associated screening of hemoglobin levels of all the subjects is evident to confirm the prediction.

Predominant site for oral ulcers according to this study was right

buccal mucosa, this can be attributed to predominant side of mastication as proved by various studies. More mastication can be attributed to more attrition which can lead to traumatic cusps.

Size of the ulcer was evaluated as mean of 7 mm ranging from 4 mm to 12 mm. The size of the ulcer denotes the host defense & status of lesion limiting local factors. Local limiting factors comprising of ulcer limitation are efficiency of phagocytes & leukocyte concentration at the lesion. Systemic disturbances such as diabetes mellitus can lead to slower local reaction leading to ulcers of large size.

Pain associated with ulcers is attributed to open nerve endings at the base of the lesion. Any stimulus such as hot food or touch can elicit stimulation of these nerve endings & in turn elicit pain. Severity of pain was found to be in direct association to that of size of ulcer. Possible & direct explanation for this may be large number of nerve endings open at the wide base. Wider the base more will be the number.

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