

# NATURAL HISTORY OF THERAPEUTIC MANAGEMENT IN ORAL CANCER

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*The natural history of a disease is greatly influenced by the course of therapeutic management, just after the tissue stage of the disease is over. The cure rate of diseases, particularly those of cancers, could probably be modified to a greater extent, if the natural history of the therapeutic management is understood properly, so that the community education programme be organised in the proper direction, to trigger early diagnosis. Home remedy was the first preference of 76.8% of oral cancer cases, 64.6% preferred traditional unqualified practitioners as their 2nd preference of place of treatment for oral cancer. Thus during the stage of fastigium a case of oral cancer gets frustrated with the hospital treatment and awaits death counting his days.*

## INTRODUCTION

There are 370,000 new cases and 200,000 deaths due to cancer in India (Govt. India, 1970) uplifting the rank of cancer to among to 10 leading causes of death in the country<sup>1,2</sup>. The prevalence of oral cancer ranges from 3.8 to 11 per 100,000 population<sup>3</sup>. Whereas the various factors like tobacco, trauma ect. have been blamed as etiological factors like social customs, illness behaviour and natural history of treatment of cancer have absolute effect over the disease process. It does not need too emphatic mention that an earlier treatment quietens cancer faster. Over 70% cases report as late as III & IV stages of oral cancer<sup>4,5</sup>. The present study was therefore undertaken to study the natural history of oral cancer therapy through the deptt. of Radiotherapy, S.S. Hospital, BHU. The term natural history of therapeutic management is used to mean the patient behaviour pattern during the course of treatment of oral cancer. The influence of past exposure, belief, cost etc. (fig.1) have important roles to play in order to modify the course of therapy.

## MATERIAL AND METHODS

One year serial study was undertaken for 60 clinically and histologically proved cases of oral cancer attending Radiotherapy unit of Sir Sunder Lal Hospital, Banaras Hindu University, Varanasi during January to December, of one year. The cases were included in the study as and when their diagnosis were confirmed. The

informations were collected in a predesigned and pretested proforma followed by home visits for approachable cases. A detailed past history of therapy was collected as explained by the patient. Each patient was followed up from point of admission until death or the end of study period, as far as practicable. In cases where chronological sequences of events could not be followed up the cases were dropped from the study population (lost to follow-up).

## RESULTS

A total of 60 cases of oral cancer were studied of which 76.6% were males. Majority of cases (56.6%) were of the age group between 45 to 64 years. Education wise 46.7% studied upto middle school followed by high school and above (11.7%), others (41.7%) were illiterate.

Earliest manifestation observed by the respondents was pain (58.3%), ulcer (56.7%), soreness (56.7%), excessive salivation (35.0%) cases. Although Leukoplakia is the precancers stage-only 5.0% cases could observe the same. Probably this is the reason for which the treatment of oral cancers is delayed. On probing it was revealed that since the stain of betel masks the patch of leukoplakia, it's presence is not clearly observed<sup>5</sup>.

However, the importance in case study of therapeutic management in oral cancer; remains in the place and time lost in search of treatment than identification of pathological signs and clinical symptoms, Before attending the hospital 86.6% cases opted for home remedies followed by unqualified practitioner (76.6%) and traditional healers (46.6%) which amount to 1 to 1.7 consultation per patient (Table 1), delaying the diagnosis. The consultations of cases at different places

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**Table-1 :**  
**Type of treatments sought by oral cancer cause priour to coming University Hospital.**

Type of treatment	Cases seeking consultations		Number of consultations	
	No	%	No	%
Home remedy	52	86.6	52	1.0
Traditional physicians	28	46.6	48	1.7
Unqualified practitioners	46	76.6	52	1.3
Qualified general practitioners	40	66.6	50	1.2

before attending the university hospital were also studied. It was observed that the pre- university hospital consultations ranged between 1-10 visits for practitioners, the mean being  $4.55 \pm 1.18$  (Table 2). In fact attendance to home remedy, traditional

practitioners or unqualified practitioners occupied a major period in pathological stage of oral cancer, both in the prodrome or fastigium. The responses regarding the reasons for attending other sources other than university hospital was based on the past experiences

**Table 2:**  
**Distribution of oral cancer cases according to the number of consultations before reporting to University Hospital.**

Number of consultations	Number of cases	
	Number	Percentage
2	2	3.3
3	11	18.3
4	16	27.7
5	14	23.4
6 and above	17	28.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

$$X = 4.55 \pm 1.18 \text{ Range } 1 - 10$$

**Table 3 :**  
**Distribution of the types of consultations availed in order of preference before preporing to University Hospital**

Type of consultations	Total consultaions		1st preference		2nd preference		3rd preference		4th preference		5th preference		Priority Index (PI)
	No	%	No	%	No	%	No	%	No	%	No	%	
Home remedies	52	18.2	46	76.8	2	3.2	-	-	-	-	4	7.1	91.6
Traditional Physicians	48	16.8	6	9.6	20	32.3	10	16.9	9	18.7	3	5.4	67.0
Unqualified groups G.P.'s	52	18.2	4	6.6	20	32.3	13	22.1	14	29.2	1	1.8	64.6
Qualified G.P.'s	50	17.5	2	3.4	11	17.7	17	28.8	7	14.6	13	23.2	52.8
Hospital	83	29.3	2	3.4	9	14.5	19	32.2	18	37.5	35	62.5	42.0
<b>Total</b>	<b>285</b>	<b>100</b>	<b>60</b>	-	<b>62</b>	-	<b>59</b>	<b>100</b>	<b>48</b>	<b>100</b>	<b>56</b>	-	-

$$PI = \frac{\sum x_i f_i}{N n_p} \times 100 \text{ Where } n_p = \text{number of priorities, and the other notations have their usual meaning.}$$

of the people on home-remedy and belief on the traditional practitioners. The nearness and the cost-wise cheapness of this kind of practices are some other reasons for the patients attending these systems (fig. 1).

In practice form the 'differential point' of pathogenic phase till the end period of fastigium the cases of oral cancer spend their time without effective treatment. Thus by the time the patient reaches the teaching hospital is probably in a very late stage-with massive metastasis. He is then asked for surgery, palliative treatment or Radiotherapy or a combination. While he is discharged from the hospital he is left with frustration regarding medical science/colleges and awaits death counting his days.

In practice 76.8% cases depend on home remedy as their first preference while 32.3% cases prefer treatment from traditional practitioner as their second preference. Even 22.1% visit unqualified practitioners as their (Table 3) third preference. The preference of the people was further translated into Priority Index (P.I.). The PI was calculated by computing mean of preference after allotting a score in reverse and finally this mean was converted into percentage. It was observed that the Home remedy and traditional practitioners were rendered the earliest preferences with priority index (PI) as 91.6% and 67.0% respectively. The hospital care received the last preference the PI being 42.0%. Considering the mean consultation are 4.5. times and the duration of treatment varies from 15 to 60 days at each stage (Table 4) the lag period of therapy (the period lost before proper therapy starts) amounts to 2 to 10 months

without any gap between the consultations. The mean duration of treatment for Home remedy, Traditional Practitioners, unqualified practitioners, qualified practitioners and hospital were observed to be 435+-228.2, 333+-183.4, 450+-367.6, 326.25+-219.9 and 543.7+-307.9 respectively indicating the massive loss of days during the course of treatment.

## CONCLUSION

A minimum of 2 to 10 months of period is lost for a patient of oral cancer before he attends a treating hospital for cancer. Depending upon the 1st symptom/sign detected by the patient the lag period of treatment may be too much for the patient. An education campaign with the features of early detection and place of treatment might reduce the lag period and improve the outcome of treatment.

Table-1 : Type of treatments sought by oral cancer cause prior to coming University Hospital.

Table-2 : Distribution of oral cancer cases according to the number of consultations before reporting to University Hospital.

Table-3 : Distribution of the types of consultations availed in order of preference before reporting to University Hospital.

Where np= number of priorities, and the other notations have their usual meaning.

Table-4 : Duration and type of treatment availed by cases before reporting at the University Hospital.

## NATURAL HISTORY OF TREATMENT IN ORAL CANCER - FIG 1

**Table 4 :**  
**Duration and type of treatment availed by cases before reporting at the University Hospital.**

Groupwise duration in days	Cumulative duration of treatment				
	Home remedy	Traditional treatment	Unqualified practitioner	Qualified practitioner	Hospital therapy
15	135	285	75	330	570
16 - 30	510	600	900	630	930
31 - 60	675	270	585	225	495
60 +	420	180	240	120	180
Mean ( $\bar{X}$ )	435	333.7	450	326.2	543.7
S.D.	± 226.1	± 183.4	± 367.6	± 219.9	± 307.9

## REFERENCES

1. Goud ML, Mohapatra SC, Gaur SD, Mohapatra, Khanna NN : Epidemiological Correlates of Oral Cancer, Eur. J. Epidem, 1991 Vol 5, No. 1, .
2. Jussuwala, DJ; Henenszal, W. : Despande, VA and Natekar, MV; Cancer incidence in Greater Bombay Assessment of Cancer risk by age BJC 1968 22, 623.
3. ICMR:Annual Report of Director General, 85-86, 1975, IMS and SS Hospital, Banaras Hindu University, Varanasi, Annual Report 1995
4. Wahi, PN: The epidemiology of oral and oropharyngeal cancer, A report of the study in Mainpuri district, U.P. India Bull WHO 1968 38, 495-521, .
5. Tripathi, CR : Preventive aspects of cancer. Swasth Hind. 1979 243.

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