

Evaluation for noncompliance of recall in patients reporting to oral pathology department: Longitudinal study of 5 years

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Abstract

Background: Regardless of the form of treatment, long-term follow-up of the patient is an absolute necessity. This study aimed to follow surgically treated patients visiting our department of oral pathology over 5 years (January 2011–December 2015) to monitor recurrence of the condition, patient compliance and reasons for noncompliance.

Materials and Methods: We conducted half-yearly recall for patients visiting our department from January 2011 to December 2015. Patients were recalled through the use of letters, telephonic reminders and e-mails.

Results: The study included 171 recalled patients of whom, 42 (24.56%) reported for follow-up, while the remaining 129 (75.43%) did not report for follow-up. Of the 42 reporting patients, 26 (61.90%) reported once, 10 (23.81%) twice and 6 (14.28%) three times. Recurrence of the condition was reported in two cases. The reasons for noncompliance included: financial constraints (22.48%), casual attitude (37.20%), reported to nearby hospitals (5.42%) and lack of time (11.62%). Some patients could not be sent reminder letters due to incomplete address (7.75%), the wrong pin code (6.97%), change of address (4.65%), locked house (3.10%) and death of the patient (0.77%).

Conclusion: This study highlights patient recall appointment noncompliance, ascribing various reasons to the patient's attrition rate for recall appointments. Probable solutions for increasing the compliance for recall need to be addressed, and further research should be conducted to evaluate these solutions.

Keywords: Follow-up, patient's compliance, recall, recurrence

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INTRODUCTION

The care of patients does not only end with the completion of a definitive treatment but also involves a period of posttreatment follow-up. This routine long-term follow-up is aimed at early detection of locoregional recurrences and metastases, based on the assumption that such recurrences are more likely to be salvaged if detected at

the earliest opportunity. It also plays a role in the evaluation of disease control, reclamation of functional loss and pain management, and it impacts the emotional and psychological well-being of the patient.^[1] In addition, a routine follow-up is useful for the evaluation of the efficacy of the primary treatment.^[2]

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Several authors have reported that follow-up consultations have extensive and affirmative aspect apart from their contributions to the patients' survival rate, including: (1) assessing the efficacy of treatment and its morbidity, (2) management of second primary malignancies and additional cancer-related morbidities, (3) detection and amelioration of treatment-induced complications, (4) provision of psychological and psychosocial assistance in the rehabilitation of patient and (5) enhancement of the relationship between physician and patient. The main expectation of frequent clinical follow-up is to detect cancer recurrence at an early stage in asymptomatic patients that would lead to earlier and more successful salvage treatments and thereby reduce mortality and/or morbidity.^[3]

Various studies in the literature stress the importance of regular follow-up in head and neck cancer (HNC) patient. For the follow-up interval of HNC, one guideline recommends: 1st-year posttreatment follow-up, 1 to 3 months; 2nd-year posttreatment follow-up, 2–4 months; 3rd-year posttreatment follow-up, 3–6 months; 4th and 5th years, 4–6 months; and after 5 years, every 12 months, after the initial treatment.^[4] Similarly, various follow-up studies focus on the causes of recurrence of individual entities such as ameloblastoma and odontogenic keratocyst.^[5,6] However, to the best of our knowledge, there are no studies regarding recall itself. Hence, the present study was carried out to a specific objective to evaluate the success of recall by studying patients' compliance and reasons for noncompliance with recall protocols. This could probably be the first study on patient's follow-up conducted by our department of oral pathology. Since the present study being a novel observational study, there were no prespecified hypotheses prior to the start of the study.

MATERIALS AND METHODS

As a protocol, half-yearly recalls are routinely conducted at our institute and also in our department of oral pathology. The present study documented follow-up of 171 patients from January 2011 to December 2015. Participants in this study were those patients who reported to the department of oral pathology and were surgically treated for locally aggressive lesions including benign odontogenic cysts and tumors. Patients were recalled by sending them letters and providing reminders by telephone and e-mail. At each recall, patients were thoroughly examined, radiographed and a review of the patient's current symptoms, and any additional concerns were duly recorded.

Participation in the study was voluntary and followed by informed consent. The study was approved by the Institutional

Ethics Committee (EC-66/OPATH-06ND/2017). It was designed according to the principles manifested in the Declaration of Helsinki and consistent with the guidelines of Good Clinical Practice provided by the International Conference of Harmonization.^[7]

Data collected on recording sheets were entered into MS Office Excel sheet (v 2010) and were subjected to statistical analysis. Percentage statistics have been depicted.

RESULTS

Table 1 illustrates the various lesions affecting the patients included in the study. We evaluated 171 patients ranging in age from 8–70 years (mean age 32 years), of which 95 were male (55.5%) and 76 female (44.4%). Of the total number of recalled patients, only 42 (24.56%) aged 15–40 years (mean age 26 years) reported, which included 24 (57.1%) males and 18 (42.8%) female, while 129 (75.43%) within the 30–70 years (mean age 45 years) age group did not report [Table 2]. Thus, the follow-up compliance was appreciably higher in males and the younger age group. In studying the patterns of the 42 recalled patients, we observed that 26 (61.90%) patients reported once, 10 (23.81%) reported twice and 6 (14.28%) reported three times [Table 3]. None of the patients reported after the third recall. Substantial follow-up dropout rates were reported from 2011 to 2015, ranging from 47% in 2011 to 11% in 2015. The reasons for noncompliance included: financial constraints (22.48%), casual attitude (37.20%), reporting to nearby hospitals (5.42%) and lack of time (11.62%). Some patients were unable to receive letters due to incomplete address (7.75%), wrong pin code (6.97%), change of address (4.65%), locked house (3.10%) and death of the patient (0.77%) [Table 4].

Of the 42 recalled patients, recurrence was reported in 2 cases (4.76%). These cases included one ameloblastoma and one odontogenic keratocyst, which recurred after 3 and 2 years, respectively. Neither of these cases presented for their 6-month regular follow-up with us. Not one case out of the 42 recalled patients reported regularly for the full 5 years.

DISCUSSION

As our understanding of tumor biology, growth and metastasis spread has increased, more studies have been conducted on follow-up in patients treated for HNC. There are a number of published guidelines in the literature for posttreatment follow-up of HNC patients, such as clinical

Table 1: Lesions included in the study

Lesions	Total patients (n=171)	Reported (n=42; 100%), n (%)	Not reported (n=129; 100%), n (%)
Ameloblastoma	55	17 (31)	38 (69)
AFO	1	0	1 (100)
DGCT	2	2 (100)	0
AOT	4	1 (25)	3 (75)
OKC	40	8 (20)	32 (80)
OOC	8	2 (25)	6 (75)
Cherubism	1	1 (100)	0
Giant cell lesions	17	3 (17.6)	14 (82.35)
Benign fibro osseous lesions	13	4 (30.76)	9 (69.23)
Salivary gland neoplasm	12	2 (16.67)	10 (83.33)
NHL	3	0	3 (100)
Nerve lesion	1	0	1 (100)
Granulomatous lesions	3	1 (33.33)	2 (66.67)
Odontogenic myxoma	2	0	2 (100)
Plasmacytoma	1	0	1 (100)
Infected dentigerous cyst	4	0	4 (100)
Osteomyelitis	2	1	1 (50)
Spindle cell lesions	1	0	1 (100)
Idiopathic bone cyst	1	0	1 (100)

AFO: Ameloblastic fibro odontoma, DGCT: Dentinogenic ghost cell tumor, AOT: Adenomatoid odontogenic tumor, OKC: Odontogenic keratocyst, OOC: Orthokeratinised odontogenic cyst, NHL: Non-Hodgkins lymphoma

Table 2: Distribution of recall patients by age and gender

Characteristics	Total patients (n=171; 100%)	Reported (n=42; 100%)	Not reported (n=129; 100%)
Gender, n (%)			
Male	95 (55.5)	24 (57.1)	71 (55)
Female	76 (44.4)	18 (42.8)	58 (44.9)
Age (years) (mean)	8-70 (32)	15-40 (26)	30-70 (45)

Table 3: Frequency of patients reported for recall

Recall frequency	Patients reported (n=42; 100%), n (%)
First	26 (61.9)
Second	10 (23.81)
Third	6 (14.28)

Table 4: Reasons for noncompliance of recall patients

Reasons	Total patients (n=129; 100%), n (%)
Casual attitude	48 (37.20)
Financial constraints	29 (22.48)
Lack of time	15 (11.62)
Incomplete address	10 (7.75)
Wrong pin code	9 (6.97)
Reported to nearby hospitals	7 (5.42)
Change of address	6 (4.65)
Locked house	4 (3.10)
Death of the patient	1 (0.77)

practice guidelines for the diagnosis and management of cancer of the head and neck (the American Head and Neck Society, 1995, United States), which has more specific recommendations for cancers of the oral cavity and the head and neck area.^[4] A study conducted to evaluate the efficacy of routine follow-up in conferring an advantage in long-term survival of patients receiving combined modality treatment for advanced HNC showed that routine follow-up was important for emotional support and evaluation of treatment results rather than for improving patient survival.^[8]

There are various studies on recall primarily focusing on recurrence rate and treatment outcome.^[5,6] Ours probably is the first study from the department of oral pathology on patient recall highlighting the reasons for dropout during the follow-up, which have not been fully discussed in the literature. Findings of our study also emphasize the improved possibility of catching recurrence early and enable oral pathologists to become self-reliant as regards to patient information.

For early detection of recurrent or second primary tumors and successful treatment, the doctor, patient and regular follow-up have indispensable and complementary role.

The present study highlights patient noncompliance with the attribution of various reasons for the patient's attrition rate for recall appointments. The main reasons for noncompliance include casual attitude, financial constraints and lack of awareness. Discrepancies in the regularity of follow-up appointments could be explained by ineffective communication and lack of understanding. Based on our findings, we strongly propose that patients be educated with regard to the nature of their illness, prognoses, the potential for recurrence and clear action plans for when their problems do not improve. It is the responsibility of the doctor to ensure that their patients are aware of the importance of regular follow-up examinations. The

discrepancy in financial issues can be resolved by educating patients of the various financial support schemes run by the central government, state governments or nongovernment organizations. The use of digital communication to send clinical and radiographic images with relevant information could be of immense help. Increased use of smartphones with software applications such as WhatsApp, the social messaging service can facilitate the exchange of clinical and radiographic images taken during dental check-up while visiting the nearest dentist. Preoperative pictures linked to reminder letters can attract the patients' attention and may increase their recall compliance.

CONCLUSION

The present study emphasizes the need for improvement of the doctor–patient communication system to increase the patient recall rate. Possible solutions for increasing recall compliance need to be addressed.

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Conflicts of interest

There are no conflicts of interest.

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