Original Article

Laryngeal Carcinoma

Time Lapse from Appearance of First Symptoms to the Patients First Contact to Hospital in Laryngeal Carcinoma

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ABSTRACT

Objective: To study the Time Lapse from appearance of first symptoms to the patients first contact to hospital in laryngeal carcinoma.

Study Design: Experimental and Observational study.

Place and Duration of Study: This study was conducted at the Idris Teaching Hospital Sialkot Medical College Sialkot from Jan 2016 to Jan 2019.

Materials and Methods: Sixty patients were included in this study and Time Lapse from Appearance of first symptoms to the patients first contact to hospital in laryngeal carcinoma were recorded. The demographic data was also noted down on the designed performa. The written informed consent was taken before the start of study. The permission of Ethical Committee was considered before collection of data and publishing in medical journal. The data was analyzed on SPSS version 10.

Results: The duration, time lapse from appearance of first symptoms first contact to hospital in case in 1 month, the number of patients were 03(5%), in 2 months the patients were 01(1.66%), in 3 months the number of patients were 08(13.33%), in 5 months the number of patients were 02(3.33%), in 6 months the number of patients were 12(20%), in 7 months the number of patients were 046.66%), in 9 months the number of patients were 04(6.66%), in 12 months the number of patients were 06(10%), in 18 months the number of patients were 06(10%), in 24 months the number of patients were 10(16.66%), in 30 months the number of patients were 04(6.66%) were detected. At age 35-40 years, there were 15(44.16%) Male and 13(50%) female, at age 41-55 years there were 10(29.41%) Male and 07(26.92%) Female, at age 56-66 years there were 07(20.58%) Male and 05(19.23%) Female, at age above 67 years there were 02(5.88%) Male and 01(3.84%) Female patients.

Conclusion: It was concluded that the time lapse from appearance of first symptoms to the patients first contact to hospital in laryngeal carcinoma was variable in different patients

Key Words: laryngeal carcinomna, time elapse, first symptom, hospital contact

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INTRODUCTION

Head and neck tumor (HNC) includes many tumors that derived in the nasal cavity, glands that discharge a fluid secretion and especially saliva into the mouth cavity, sinuses in nasal cavity, the membrane-lined cavity behind the nose and mouth, oral cavity and the hollow muscular organ forming an air passage to the lungs[1].

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Approximately forty two/four hundred forty new HNC cases were diagnosed and eight thousand three hundred ninety HNC-related deaths were observed in the United States in two thousand fourteen. relating to larynx. Tumors description for thirty three point nine percent of all Head & Neck cancers[2]. relating to larynx tumor usually affects middle-aged male, & common form of skin cancer typically ninety percent of relating to larynx tumor. New occurrence is common in relating to larynx tumor. New occurrence rate in sick person with T1 stage relating to larynx tumor change from five to thirty percent and with T2 stage cancer, it change from twenty five to thirty percent[3]. As for sick persons with T3 and T4 stage disease, the New occurrence rate is thirty to fifty percent[4-6]. According to the cancer place, relating to larynx tumor can be grouped as above the glottis tumor, relating to the tongue tumors or below the glottis tumors. Primary carcinomas in the below the glottis area are comparatively less common, and only taken for one to two percent of all relating to larynx tumor[7]. The mostly of under the glottis tumors are

found late in the path of the sickness, at which point surgery is difficult. in addition to, the cancer cells break away from the original tumor rate of group of nodes found on the anterior part of the neck and along the trachea lymph nodes is high, which give to a poorer prognostication and a higher post-operative New occurrence rate[8]. The majority of the treatment failures in cases of above the glottis relating to larynx tumor are due to difficulty in the elimination of Restricted to a localized region sickness, Specially, regional disease in the lymph node of neck. New occurrence most usually occurs in the hollow muscular organ forming an air passage to the lungs, including the various parts surrounding the mouth of invertebrates area, followed by the regional lymph nodes and the less commonly affected distant sites[9,10].

The treatment choice for New occurrence relating to larynx tumor are as follows: i) Occurring again several times X-Ray treatment with or without medical treatment, ii) saving something surgery, iii) caring treatment or iv) treatment that relieves suffering medical treatment. The better than another method for the therapeutic treatment of New occurrence of larynx carcinoma after failure of non-surgical (X-Ray treatment or medical & X-Ray treatment) treatment failure is surgery. prevention of wasteful use of a resource surgery is likely in approximately one-third of these New occurrence of carcinoma. Endoscopic surgery using a CO2 laser or open partial laryngeal surgery (partial vertical, supracricoid or supraglottic laryngeal surgeries) can also be used. A past work showed that, compared with total laryngeal surgery, An operation to remove the cancer and some normal tissue around it, but not the breast itself has a better prognostication, but it is possible that these results were caused by the bias introduced by the selection, as more advanced sick persons had to receive a total laryngeal surgery[11]. As for sick person who have undergone surgery, a 2nd or 3rd surgery can also be the first preference as that aims at the complete cure of a disease[12,13]. New occurrence advanced-stage tumors and those with below the glottis extension should generally be treated by total laryngeal surgery. The use of Treatment that is given in addition to the primary (initial) treatment depends on the dangerous factors. X-ray treatment with concurrent systemic treatment is advised when the new occurrence sites are non-surgical or when the sick person has not previously undergone X-ray treatment, providing the sick persons general condition allows it. If a sick person with tumor new occurrence is neither eligible for surgery nor eligible for X-ray treatment, then the treatment approach is the same as that for sick persons with produced by metastasis disease. The overall five-year survival rate of sick persons with local new occurrence who undergo Palliative surgery varies greatly from twenty-two to sixty-six percent[14–17]. One previous study has even shown the five-year survival rate in this sick person population to be as low as two percent[4].

MATERIALS AND METHODS

Sixty patients were included in this study and Time Lapse from Appearance of first symptoms to the patients first contact to hospital in laryngeal carcinoma were recorded. The demographic data was also noted down on the designed performa. The written informed consent was taken before the start of study. The permission of Ethical Committee was considered before collection of data and publishing in medical forum journal. The data was analyzed on SPSS version 10.

RESULTS

The duration, time lapse from appearance of first symptoms first contact to hospital in case in 1 month , the number of patients were 03(5%), in 2 months the patients were 01(1.66%) , in 3 months the number of patients were 08(13.33%) , in 5 months the number of patients were 02(3.33%) , in 6 months the number of patients were 12(20%), in 7 months the number of patients were 04(6.66%) , in 9 months the number of patients were 04(6.66%), in 12 months the number of patients were 06(10%) , in 18 months the number of patients were 06(10%) , in 24 months the number of patients were 10(16.66%) , in 30 months the number of patients were 04(6.66%) were detected as shown in table no 1**.**

Table No.1: Time Lapse from Appearance of first symptoms to the patients first contact to hospital in laryngeal carcinoma

Duration	Number of patients	Percentage
1 month	03	5%
2 month	01	1.66%
3 months	08	13.33%
5 months	02	3.33%
6 months	12	20%
07 months	04	6.66%
9 months	04	6.66%
12 months	06	10%
18 months	06	10%
24 months	10	16.66%
30 months	04	6.66%
Total	60	100%

At age 35-40 years, there were 15(44.16%) Male and 13(50%) female, at age 41-55 years there were 10(29.41%) Male and 07(26.92%) Female, at age 56-66 years there were 07(20.58%) Male and 05(19.23%) Female, at age above 67 years there were 02(5.88%) Male and 01(3.84%) Female patients (table 2).

Table No.2 : Age and Gender Distribution

Serial no	Age(years)	Male	Female
1	35-40	15(44.16%)	13(50%)
2	41-55	10(29.41%)	07(26.92%)
3	56-66	07(20.58%)	05(19.23%)
4	67 and above	02(5.88%)	01(3.84%)
Total(60)		34(100%)	26(100%)

DISCUSSION

The present study shows the significance of various serving to predict the likely course of a medical condition factors for primary and new occurrence laryngeal tumors, and the corresponding treatments. The three- five & ten-year survival rates of the entire sick person sample were approximate to be sixty-eight point nine, fifty-three point six & thirty-five point seven percent, respectively. The sick persons who developed local new occurrence had five-year survival rates of sixty-one point eight percent, which is better than the rate of fifty-two point one percent in the sick persons who developed regional recurrence and zero percent in the sick person who developed distant cancer cells break away from the original (primary) tumor. These figures are in accordance the results reported by Brenner et al, in which the two & five-year survival rates were approximated to be sixty-seven & fifty-six percent, respectively[6].

Due to the natural boundaries that stop the spread of tumor cells in the body and the relatively early symptoms associated with new occurrence, the possibility of successfully performing palliative surgery in sick persons with local new occurrence without damaging vital function is quite high[18,19]. In the present work, palliative surgery resulted in a better prognostication in cases of local recurrence. Palliative surgery was performed in sixty-eight point three percent of the cases of local new occurrence and resulted in a five-year survival rate of seventy-three percent, which was much better than the thirty-two point three percent survival rate in local new occurrence cases in which palliative surgery was not performed. This is similar to the results of the above said work by Brenner et al[6], where sixty-nine percent of the local new occurrence cases received palliative surgery, with a five-year survival rate of seventy-six percent. However, Lacy and Piccirillo mentioned that for sixty-four point five percent of the sick persons with new occurrence who underwent palliative surgery, the two-year survival rate was only fifty-five percent. The reason that the present work had a better survival rate was possibly due to the fact that there were more initial early-stage sick persons (fifty-eight point six vs. fifty point eight percent). Moreover, in the work by Yuen et al[5], only twenty-one percent of the sick persons with local new occurrence underwent palliative surgery, and the five-year tumor-free survival rate was just forty-two percent. The reason that so few sick persons were suitable for palliative surgery in this work was as ninety-seven point nine percent sick persons presented with initial T3 or T4 tumors and hundred percent sick persons underwent total laryngeal surgery prior to new occurrence.

Sick persons with a disease-free interval of twelve months showed a seventy-four point one percent five-year survival rate, which was significantly better than those with an interval of less than twelve months. This was also in somewhat good resemblance with the figures reported by Lacy and Piccirillo, where the two-year OS rate for the group with a disease-free interval of twelve months, two years and less than two years was thirty-three, thirty-seven & fifty-three percent respectively, and Brenner et al, where the five-year OS rate for the group with a disease-free interval of fifty-six & less than six months was forty-four & seventy percent, respectively[9].

The present variable quantity analysis showed that the following factors are negatively correlated with the five year OS rate: Age less than sixty years, smoking index six hundred, poor tumor grade, above the glottis and below the glottis tumors, initial tumor T stages T3 and T4, initial tumor UICC stages III and IV, positive located at or near a node of the initial tumor, disease-free interval less than twelve months, distant produced by metastasis disease and non-eligibility of the new occurrence tumor for surgery. In addition, medical treatment & X-ray treatment for the initial tumor were found to be significant poor serving to predict the likely course of a medical condition factors. There could be several reasons for this association. Firstly, and most importantly, the effect of selection unfairness cannot be ruled out. Sick persons who initially had poor serving to predict the likely course of a medical condition factors (poorly-differentiated tumors and more advanced Universal Integrated Circuit Card stage) would be more likely to receive surgery plus X-Ray treatment or medical treatment with other treatment; new occurrence tumors in the case of such sick persons would have a poorer serving to predict the likely course of a medical condition. This probably also mention why sick persons who underwent surgery plus X-Ray treatment or medical treatment with other treatments had a poorer five-year OS rate than those who received surgery or X-Ray treatment alone. Similar results have been showed by Lacy and Piccirillo. The groups that received only surgery and X-Ray treatment for the initial tumor had a two-year OS rate of sixty & fifty-seven percent, respectively, while the group that received surgery plus X-Ray treatment had a two-year OS rate of only fifteen percent. Secondly, repeating the medical treatment protocol for new occurrence tumors cannot ensure effectiveness of the medical treatment, as certain cancer cells may have drug resistance. Thirdly, if X-Ray treatment was already used for the initial tumor, repeat

radiation for the new occurrence tumor is not feasible and at the same time, palliative surgery may also not be possible due to the acute side-effect of the radiation, particularly in sick persons who experienced a shorter disease-free interval.

The present work found that smoking years was not a significant serving to predict the likely course of a medical condition factor, which is similar to the result shown by Brenner et al[6]. However, the present work found that smoking index was a significant serving to predict the likely course of a medical condition factor. This is different from the finding of Lacy and Piccirillo, according to which, smokers and non-smokers had a similar two-year OS rate of forty percent. A thorough search of other relevant literature did not show any more findings with regard to the association between smoking and new occurrence laryngeal tumors; however, a work on passive smoking and the prevalence of laryngeal tumors[20,21] revealed that sick persons with advanced tumors were mostly in the environmental tobacco smoking exposure group. Therefore, the present work attempted to determine the association between smoking and initial T stage and tumor grade. It was observed that the group with a smoking index of less than six hundred had a higher proportion of T3 and T4 tumors than the group with smoking index of < less than six hundred; moreover, the former group also had a higher proportion of sick persons with poorly and moderately differentiated tumors than the latter. These values may explain why sick persons with new occurrence tumors who had a smoking index of less than six hundred had poor prognostic factors.

In total, one hundred & twenty-two (thirty-nine point nine percent) sick persons presented with well-differentiated tumors, one hundred thirty-eight (forty-four point seven percent) with moderately differentiated tumors and forty-nine (fifteen point nine percent) with moderately-differentiated tumors. The five-year of values were sixty-two point two, fifty-five point one & twenty-three point six percent, respectively. These were quite different from the values reported by Brenner et al[6], where the proportion of well-differentiated and moderately- and poorly-differentiated tumors was twenty-three point two& seventy-six point eight percent, respectively, with corresponding five-year of rates of sixty-one & sixty-five percent, respectively. These are different from the values reported by Lacy and Piccirillo too, in which the proportion of well differentiated, moderately-differentiated, and poorly-differentiated cancer was sixty-six point one, twenty-five point eight & seven point three percent, respectively, and the corresponding two-year of rates were forty-four, thirty-four & twenty-two percent, respectively.

Multivariate analysis showed that the five-year of rate was significantly associated with the initial T stage, grade, nodal status, disease-free interval and eligibility for surgery. This is in resemblance with the results of the works by Lacy and Piccirillo and Marshak et al[6]. The work by Lacy and Piccirillo showed that initial treatment, initial TNM stage and extent of new occurrence were independent serving to predict the likely course of a medical condition factors for new occurrence in laryngeal tumor. The work by Brenner et al showed that the initial tumor site, the nodal status, the extent of new occurrence and its operability were the only factors that predicted survival.

The major limitation of retrospective studies is that the data collected are not originally designed for application in research. Therefore, certain factors responsible for the ultimate treatment outcome may be missing in the analysis and contribute to an unfairness. Thus, the conclusions from the present study should be validated in future prospective works.

In summary, the present work found five factors to be predictors of good survival in sick persons with new occurrence laryngeal tumor: Initial tumor T stages T1 and T2, a high differentiation rate, no cervical lymph node the spread of a disease-producing agency (such as cancer cells) from the initial or primary site of disease to another part of the body of the initial tumor, a disease-free interval of twelve months and eligibility for surgery.

CONCLUSION

It was concluded that the Time Lapse from Appearance of first symptoms to the patients first contact to hospital in laryngeal carcinoma was variable in different patients.

Author's Contribution:

Concept & Design of Study:	Muhammad Saeed Razi
Drafting:	Javed Riaz Qureshi, Anum Adnan
Data Analysis:	Kamran Hamid, M Sabir
Revisiting Critically:	Muhammad Saeed Razi, Javed Riaz Qureshi
Final Approval of version:	Muhammad Saeed Razi

Conflict of Interest: The study has no conflict of interest to declare by any author.

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