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IMPORTANCE OF MAXILLOFACIAL PROSTHESIS AMONG PATIENTS OF ORAL CANCER

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ASTRACT

Objective: The aim of this study is to emphasize the importance of maxillofacial prostheses in the treatment of oral cancer after surgical resection. **Study Design:** An Observational study. **Place and Duration:** In the Oral and Maxillofacial department of NID, Multan for one-year duration from February 2019 to February 2020. **Methods:** Of 2036 cancer patients, 125 were found to have oral cancers and were included in the study. Surgically treated patients were examined and analyzed for possible prosthetic rehabilitation. Oral cancer was found in 6% of all cancer patients. The most common tongue cancer in 33 (26.4%) cases; 21 (16.8%) had cheek cancer, 20 (16%) had parotid cancer, and 15 (12%) had oral and nasal cancer. The cancer of lip (4.8%) ear (2.4%) and soft palate (1.6%) made a little contribution. **Results and Conclusion:** The results of this study showed that at least half of the surgically treated patients with oral cancer could have been successfully rehabilitated with various prostheses, but many never did.

KEYWORDS: Maxillofacial prosthesis, oral cancer, obturator, speech prosthesis, glossectomy prosthesis, mandibulectomy prosthesis.

INTRODUCTION

Surgical resection of the oral and maxillofacial area due to cancer causes oral and para-oral defects. The best form of rehabilitation for these patients is surgical reconstruction. However, not all of these patients are good candidates for surgical reconstruction. The maxillofacial prosthesis is an alternative form of rehabilitation of oral and oral defects. Prosthetic rehabilitation is a fast, effective and economical method of improving the quality of life of patients. This study collected data on patients with oral cancer and analyzed for possible prosthetic indications. The purpose of this study is to emphasize the importance of maxillofacial prostheses in the rehabilitation of patients with oral cancer.

MATERIALS AND METHODS

Oral and Maxillofacial department of NID, Multan for one-year duration from February 2019 to February 2020. 125 patients were selected to carry out the project. Patients with malignant lesions of the lips, cheeks, lips, tongue, maxillary sinus, soft palate, parotid gland, nose and ear were included. Information on patient age, sex, tumor type, and tumor stage and treatment protocol were collected. Only patients who received radiotherapy (36 cases) were not included in this study. The 89 patients who had surgery along with or without radiotherapy were further examined. The size of the surgical resection was recorded during the study. These data were analyzed for possible prosthetic rehabilitation. All data was analyzed on a personal computer using descriptive statistics and a percentage frequency test using Windows SPSS version 16.0.

RESULTS

During the one-year period of this study, 2036 cancer patients were reported. 125 of them had oral and maxillofacial carcinomas (Table 1).

Eighty-nine cases were treated surgically along with radiotherapy, while thirty-six received only radiotherapy. The former was also evaluated in terms of the prosthesis. Maxillary sinus cancer was reported in ten patients. All patients received surgical treatment with radiation. Two cases of soft palate cancer have been reported. Both received surgical resection and radiation therapy. Thirty-three cases of tongue cancer were observed. Surgical resection was performed in 20 patients and radiotherapy was given to only 13 patients. Of the twenty surgical patients, 12 had only marginal glossectomy without functional disorders. The remaining eight patients had significant functional impairment of partial - full glossectomy. 20 cases of parotid gland cancer were observed. While 16 patients were surgically treated, only four patients received radiation therapy. In surgical cases

mandibulectomy was performed in 10 patients with parotid resection. Six patients had lip cancer. Five cases were surgically treated. All surgically treated patients had relatively smaller defects and were sufficient for surgical reconstruction. 21 cases of cheek cancer were observed. While surgical resection was performed in 13 of 21 cases, only in 8 cases radiotherapy was used. Fifteen cases had involvement of floor of the mouth. Surgical resection was performed in eight cases and used for radiation therapy, while only seven patients received radiation therapy. Fifteen cases of nasal cancer were observed. Twelve patients were surgically treated and only three patients underwent radiotherapy. Ear cancer was detected in three patients. All of them received surgical resection and radiation therapy.

	CASES	MALE	FEMALE	Percentage	
				Male	Female
Lip	6	5	1	83	17
Cheek	21	10	11	47.6	52.4
Tongue	33	25	8	75	25
Floor of the Mouth	15	9	6	60	40
Maxillary Sinus	10	8	2	80	20
Soft Palate	2	2	x	100	0
Parotid Gland	20	13	7	65	25
Nose	15	10	5	66	34
Ear	3	3	x	100	0
Total:	125	85	40	68	32

DISCUSSION

Oral cancer patients are treated at most major hospitals in Multan City, where general surgery departments and E.N.T are well developed. As a treatment protocol, most patients are referred for radiation therapy. The main locations where the maximum number of cancer patients are reported are radiotherapy hospitals operating under the supervision of the Pakistani Atomic Energy Commission. All major general hospitals in Multan relate cancer to radiation therapy before and after surgery. 2036 cancer patients reported within one year. Only 125 of them had oral cancer and were included in this study. Patients had cancer of the lips, cheeks, tongue and mouth, maxillary sinus and soft palate, jaw, nose and ear of the salivary gland. The study shows that 6% of all cancers are oral cancer. Blot et al. They classify this as the third most common body cancer in South Asia. Boring et al. He classified it as the fifth most common body cancer in Europe. The incidence was higher in men than in women. The ratio is about 2: 1 (Table 1). These numbers are similar to others. Eighty-six percent of cases in this study were over 40; this is similar to the number of cancers around the world. 4.7 Eighty-nine (70%) of all patients with oral cancer were surgically treated and then referred for radiation therapy. The remaining thirty-six (30%) only received radiation therapy. 89 cases were selected for this project. Of all these surgical cases, thirty-five (39%) were considered suitable for surgical reconstruction. The decisive factor is the smallest loss of soft tissue, the youngest age and health. The remaining 54 cases (61%) were hopeless in any surgical reconstruction. Increased loss of hard and soft tissues, extended age and poor health were the main factors that eliminated the possibility of any surgical reconstruction. 61% of surgical cases, 43% of all patients with oral cancer, i.e. Fifty-four were further analyzed and considered eligible for possible prosthetic rehabilitation. In this study, the incidence of maxillary sinus cancer was found in ten cases (8.13%). In these patients, completion of the maxillary procedure was partial, it could not be restored by surgical reconstruction, and rehabilitation could only be performed with a prosthesis. During this study, it was observed that none of the patients undergoing maxillofacial tooth extraction had benefited from surgical obturators. This is due to a lack of patient guidance and a lack of coordination between surgeons and prosthetics. Four patients undergoing maxillofacial surgery received a temporary obturator that improved their quality of life. The delay in prosthetic rehabilitation causes some facial disorders on the affected side and causes mental trauma to patients. Exact shutters provided to patients significantly improve their quality of life. Two patients (1.6%) had soft palate cancer and resection was on the soft palate. In this study, tongue cancer was found in thirty-three (26.4%) cases. Twenty patients underwent radiation and surgical treatment, and twelve patients underwent marginal resection without significant functional disorders. The remaining eight patients had significant functional impairment of partial - full glossectomy. These eight patients, who make up more than 40% of glossectomy cases, can be rehabilitated with prosthetics. There were twenty (16.5%) cases of parotid gland cancer. Only four patients received radiation therapy. Mandibulectomy was performed on ten of six young surgical patients. Fifteen cases of oral cancer were observed, eight of which showed mandibular involvement. These patients had mandibular

discontinuities and partial or segmental resection. Prosthetic rehabilitation was considered in all eighteen patients. In the case of established mandibular involvement in this study, several prosthetic options are available in eighteen (14.5%) cases of all cancer patients, but perhaps better results can be obtained by placing the implant. Implants have a high cost disadvantage, which can be compensated with the help of hospital care funds. Only one of the eighteen patients came for prosthetic rehabilitation. Six (4.87%) cases of lip cancer were examined. All patients underwent surgical resection. All these patients had minor surgical defects and could be successfully regenerated by surgery. In this study, cheek cancer was detected in 21 cases (17%). Thirteen patients underwent surgical treatment and eight patient's only radiation therapy. Six patients had small soft tissue defects that were more suitable for surgical reconstruction. The remaining seven cases had a cheek resection involving adjacent follicular processes. They were considered suitable for prosthetic rehabilitation. Nasal cancer was found in 15 (12.19%) of all oral cancers. While twelve were surgically treated, only three received radiation therapies. While four surgical cases were considered suitable for reconstruction, eight had no choice but prosthetic rehabilitation. Ear cancer was observed only in three cases (2.4%). They both had a complete resection of the outer ear and can only be rehabilitated with a prosthesis.

CONCLUSION

From this study, it can be concluded that oral cancer is common in our world. Tongue cancer is the most common form of oral cancer. During this study, it was observed that there were insufficient guidelines for patients for rehabilitation. Many patients who could use a prosthesis have never received a prosthesis. In hospitals where patients with oral cancer are treated, prosthetic rehabilitation centers should be created and treatment planning for patients with oral cancer should be involved in the prosthesis.

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