

DIFFERENT TREATMENT MODALITIES OF ADVANCED STAGES OF LARYNGEAL SQUAMOUS CELL CARCINOMA

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Introduction

Multiple treatment options are available for management of laryngeal cancer. For early (stage I and II) larynx cancer, both larynx-sparing surgery (transoral endoscopic or open surgical resection) and definitive radiation therapy (RT) generally offer equivalent local tumor control and survival, Organ-sparing approaches permit larynx preservation in patients with locoregionally advanced cancer of the larynx, but do not provide a survival advantage over total laryngectomy. However, because of the importance of the larynx to speech and swallowing function, most patients with advanced cancer of the larynx (stage III and IV) should be offered the option of organ preservation, unless contraindicated. Although locoregional control of the tumor is one of the most important aims in tumor management nowadays, there is great interest in organ preservation modality of treatment as well as functional preservation.

Aim of the work

To study the efficacy of organ preservation protocol (induction chemotherapy followed by concomitant chemo radiotherapy) in T3 and T4a squamous cell carcinoma of the larynx and to asses the functions (swallowing and respiratory functions) of the preserved larynx in comparison to swallowing and respiration in patients after surgical management.

Patients and Methods

40 cases of advanced stage laryngeal SCC (T3 and T4)divided into two groups 20 cases for each group, group (A) managed by organ preservation protocol, and group (B) managed by total laryngectomy. Both groups were followed up for 18 month. Assessment of swallowing and respiration were assessed in both groups . Swallowing function assessment was done using FEES, video fluoroscopy and DHI questionnaire. Respiratory function assessment was done using SGRQ.

Results

Table (1): Comparison between the two studied groups according to incidence of recurrence.

	Group A (n = 20)		Group B (n = 20)		P
	No.	%	No.	%	
Follow up					
Free	12	60.0	18	90.0	0.028*
Recurrence	8	40.0	2	10.0	
9 month	2	10.0	1	5.0	^{FE} p=1.000
12 month	4	20.0	1	5.0	^{FE} p=0.342
15 month	2	10.0	0	0.0	^{FE} p=0.487

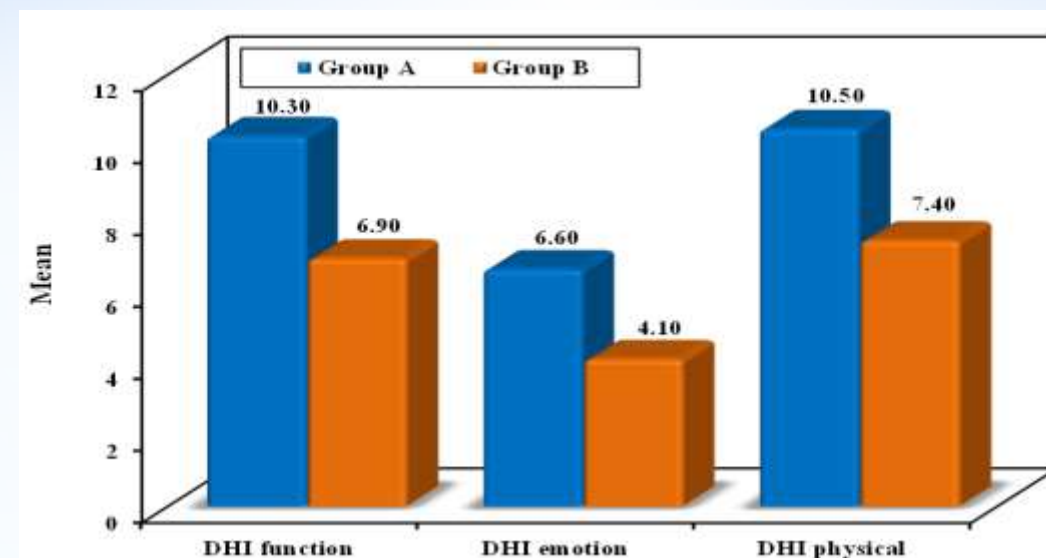


Figure (1): Comparison between the two studied groups according to different DHI subscales .

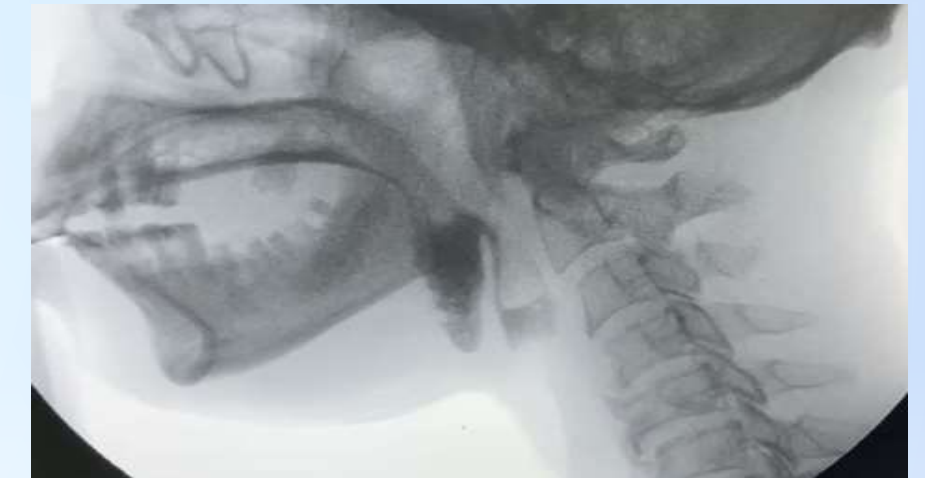


Figure2: Anterior pouch after total laryngectomy.

Conclusion

this study showed that better locoregional control in cases managed surgically than cases managed by organ preservation protocol (incidence of recurrence was lower in cases managed surgically). Assessment of laryngeal functions showed that swallowing difficulties were less evident in cases managed by total laryngectomy than cases managed by organ preservation . Also there were anatomical abnormalities like anterior pouch, pseudo epiglottis and delayed peristalsis after laryngectomy. while Respiratory function assessment showed non-significant differences between both groups regarding daily activities. Tumor stage, lymph node metastasis, smoking and age of the patients had great effect on the result. Advanced tumor stage (T4), lymph node invasion and smoking were associated with higher incidence of tumor recurrence. Also advanced tumor stage and old age were associated with more swallowing difficulties after management in both groups.