Prolonged Survival After Oesopharyngolaryngectomy For Hypopharyngeal Squamous Cell Carcinoma About Two Cases

Bourguiba MA; Ghalleb M; Khemir A; Bensafta Y; Sayari S; BEN Moussa M
General Surgery Department A Charles Nicolle Hospital

Abstract:
Introduction: Head and neck squamous cell carcinomas (SCC) is the sixth most common form of cancer worldwide and has a poor prognosis. In addition to the disease poor prognoses the total Circular Oesopharyngolaryngectomy (TCOPL) is a high risk procedure that carries a lot of mortality and morbidity. Our aim is to report two cases of prolonged survival despite the radical surgery the absence of adjuvant therapy and the lymphnode involvement.

Case report:
Case one: A 55 year-old-arabic female, with no past medical history, presented to the outpatient clinic in March 2000, with dysphagia and a declining general state in the last six month. The physical examination was normal. The oesogastroscopy did found a suspicious 6 cm tumor located 14 cm from the dental arch. The biopsy of the tumor concluded to a SCC. The disease staging did not found distant metastasis. The patient was scheduled for surgery and had Radical oesolaryngectopharyngectomy. Histologically staged as pT2 N1 . The patient did not receive an adjuvant therapy. The follow up was normal until March 2012. 

Case Two: A 45 year old heavy smoker Arabic Male, with no past medical history, presented with dysphagia and a declining general state. The physical examination was normal. The oesogastroscopy did found a suspicious bulging tumor located in the hypopharynx. The biopsy of the tumor concluded to a well differentiated squamous cell carcinoma. The disease staging did not found distant metastasis. The patient was scheduled for surgery and had Radical oesolaryngectopharyngectomy. Histologically staged as pT2 N1. The follow up showed a suspicious lesion in the inferior lobe of the right lung. He had an inferior right lobectomy the patient received and adjuvant chemotherapy with a regimen based on cisplatinum and 5-fluouracil. He was last seen in February 2015 with no sign of local or distant Relapse.

Conclusion: This two case report is not enough to conclude for the superiority of any treatment modalities and only raise the question of the extent of treatment to offer the patients. More randomized studies including patient with long term survival are needed in order to find statistically significant prognostic factors helping adjusting the treatment to the patient.

Keywords: Hypopharyngeal cancer, total circular oeso pharyngo laryngectomy, Prognostic factors, long term survival, case Report

I. Introduction
Head and neck squamous cell carcinomas (SCC) is the sixth most common form of cancer worldwide and has a poor prognosis.

The reasons for the remarkably poor prognosis of hypopharyngeal cancers is their aggressive behavior represented by strong tendency for submucosal spread, early occurrence of lymphnode invasion, tendency for direct invasion of adjacent structures in the neck and high incidence of distant metastases. In addition to the disease poor prognoses the total Circular Oesopharyngolaryngectomy (TCOPL) is a high risk procedure that carries a lot of mortality and morbidity. It’s also known to be a mutilating surgery that leads to hoarseness however it allows oral feeding. In our work we report the case of two patients with a prolonged survival after Oesopharyngolaryngectomy for cancer.

II. Case Report

Case one:
A 55 year-old-arabic female, with no past medical history, presented to the outpatient clinic in March 2000, with dysphagia and a declining general state in the last six month. The physical examination was normal. The oesogastroscopy did found a suspicious 6 cm tumor located 14 cm from the dental arch. The biopsy of the tumor concluded to a SCC. The disease staging did not found distant metastasis.
The patient was scheduled for surgery and had a TCOPL with a reconstruction using a coloplasty with an isoperistaltic orientation and pediced on the left superior colic artery. The histologic examination did conclude to a hypopharyngeal SCC staged as pT2 N1 M0. The patient did not receive any adjuvant therapy. The follow up was normal until March 2012 were she was hospitalized for an abdominal hernia. Until May 2015 the patient is alive with no sign of local or distant Relapse.

Case Two
A 45 year old heavy smoker Arabic Male, with no past medical history, presented to the outpatient clinic in April 2007, with dysphagia and a declining general state in the last four month. The physical examination was normal. The oesagogastroscopy did found a suspicious bulging tumor located in the hypo pharynx. The biopsy of the tumor concluded to a well differentiated SCC. The disease staging did not found any distant metastasis. The patient was scheduled for surgery and had a TCOPL with a reconstruction using an esophagocoloplasty with an isoperistaltic orientation and pediced on the left superior colic artery. The histologic examination did conclude to a hypopharyngeal SCC staged as pT2 N1 M0. He was referred to Salah Azaiez Institute Of oncology to receive adjuvant therapy but he never consulted. Until 2009; he consulted for breath shortage, the patient had a computed tomography scan that showed a suspicious lesion in the inferior lobe of the right lung. He had an inferior right lobectomy using a right posterolateral thoracotomy. The histologic examination confirmed the relapse. The patient received and adjuvant chemotherapy with a regimen based on cisplatinum and 5-fluouracil. He was last seen in February 2015 with no sign of local or distant Relapse.

III. Discussion
Hypopharyngeal cancer is a rare disease with an incidence of less than 1 per 100,000 population and accounting only for 3%–5% of all head and neck cancers (1). These tumours typically occur to individuals who are older than 50 years of age, with a peak incidence in the sixth and seventh decades (2). Tobacco and alcohol represent the major risk factors for the development of hypopharyngeal cancer Risk increases with both the quantity and duration of tobacco and alcohol use (3,4). The role of human papilloma virus (HPV) in the carcinogenesis of hypopharyngeal cancer is less well defined in comparison to the ororapharyngeal cancer (5).

Early hypopharyngeal cancers produce a mild, nonspecific sore throat or vague discomfort While swallowing. However, the majority of patients with cancers of the hypopharynx presents with advanced local and/or regional disease and Predominating symptoms are those related to the locoregional disease. Approximately 50% of patients present with palpable neck lymphadenopathy as the only complaint on initial clinical examination (6).

Clinical and endoscopic assessment should be focused on determining the extent of the primary tumour and laryngeal mobility. Imaging studies including computed tomography (CT) and/or magnetic resonance imaging (MRI) can be used to define the extent of the disease at the primary site in surrounding structures. (5) They also help in assessing distant metastatic disease. All this Data is mandatory in order to establish a clear line of treatment.

The hypopharyngeal cancer is a malignancy with an extremely poor prognosis. In most studies the 5-year survival rate has been reported to be inferior to 30% regardless of treatment modality (7,8) Mochiki and al (8), did found a disease specific survival (DSS) at 5 years of 46.3%. Other studies did also found a DSS over 30%(9–11). Most of the patients in those series were treated with aggressive surgical resection that consisted of total or partial pharyngolaryngectomy and bilateral neck dissection. Leading, Mochiki and al to conclude to the superiority of surgical treatment modalities over radiation-based modalities in survival (8). Conservation surgery or radiotherapy alone are considered effective treatment modalities for patients who present with T1N0-1 and selected T2N0 obtaining satisfactory rates of local control while optimising functional outcome (12,13). The selection of patients for conservation surgical procedures or radiotherapy as a primary treatment modality must be carefully accomplished.

In our two cases we did opt for a more radical approach due to the fact that both our patient had a bulky T2 lesion invading the esophagus. And as shown in Pameijer and al (14) study the rates of local control also decrease in bulky T2 lesions and in those larger than 2.5 cm. Our two patients did undergo a TCOPL with no other adjuvant treatment and did manage to survive for more than 13 years with no recurrence for the female patient and an 8 year survival with a distant pulmonary relapse for the male patient.
Both of our patients were staged N1 and many authors reported that pathological nodal status was the most significant prognostic factor for CSS, loco-regional control, and distant metastases (8, 15–17). So despite having pathological positive lymphnodes and the fact that they did not receive further treatment after the surgery our patients managed a long term survival.

In addition, the TCOPL is a high risky procedure with a lot of morbidity and mortality. It’s certainly allow the patient oral alimentation but also deprive him from his ability to speak which can be incapacitating, reducing the patient autonomy and their ability to interact with the people surrounding them. Both patients managed a long term survival despite having a poor prognoses malignancy, having nodal involvement and the fact that they did receive an extensive high risky procedure that was not followed by any adjuvant treatment. However, being a report of two cases our work couldn’t assume that radical surgery or any patients characteristics helped improve the survival and more pooled analysis of the different long term survival cases must be done in order to find statistically significant prognostic factors for long term survival.

IV. Conclusion

In our work, we did report the cases of two patients with lymphnode positive hypopharyngeal cancer and a prolonged survival. Our patients only received a radical and mutilating, surgery with no adjuvant treatment adding more to the rarity of our report. However this two case report is not enough to conclude for the superiority of any treatment modalities and only raise the question of the extent of treatment to offer the patients in order to guarantee a long term survival with a good quality of life. More randomized studies including patient with long term survival are needed in order to find statistically significant prognostic factors that will help us adjust the extent of treatment to the patients needs.

Declaratio

Ethics approval and consent to participate : Written informed consent was obtained from the patients for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.”

I declare no conflicts of interest between the author and that this work was made with all the due respect to the code of ethics under the supervision of the medical and ethic comitee of the Tahar Mammouri Hospital.

Data and supporting materials section :

Google scholar have been used searching for the articles cited in the reference list ZOtero for windows was used for referencing

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I declare no competing interests

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Authors' contribution :

MG, MAB : data collection, review of the litterature and drafted the manuscript
AK, SS, YBS : review of the litterature and drafted the manuscript
MBM : drafted the manuscript

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References


**Figure title and legend section:**

Picture 1: opacification of the neo esophagus done in 2012

Picture 2: opacification of the neo esophagus done in 2013