Diagnose.me Case Report

Case number	[redacted]
Created on [DD/MM/YY]	[redacted]
Written by	Prof. Dr. Florian Wolf, Radiologist Prof. Dr. Klaus Kaczirek, Surgeon Prof. Dr. Gerald Prager, Oncologist

1. Clinical information

Gender	Male
Age	[redacted]
Body part(s)	Esophagus
Suspected diagnosis	Esophageal cancer
Additional information	**Relevant medical history:** New diagnosis of esophageal cancer **Tumor type:** Spinocellular carcinoma of the esophagus

2. Details of examinations

Modality	Body part	Series/sequences	Date of exam [DD/MM/YYYY]
MRI	[redacted]	[redacted]	[redacted]
CT	[redacted]	[redacted]	[redacted]

3. Patient's history/ questions

We know accurate diagnosis of my husband - esophageal cancer. What we are concerned about is the possibility of different kind of surgery or different treatment than that

determined by [redacted] oncologists. The point is that they want to remove not only the tumor in the esophagus, but also larynx and pharynx. Thus my husband would loose his vocal cords, have breathing problems and even problems with eating - a gastric tube would be inserted. It is difficult to put up with such situation all of a sudden, and that is why I am considering this option.

4. Description of available examinations

(radiological, serological, pathological, other)

Histology: Spinocellular carcinoma of the esophagus (moderately differentiated, non-keratinizing), Grade II. Invasion to subepithelial tisue. Imunohistochemistry: p63 a CK5/6 posit., p16, CK19 , CK7 negat. Ki67 positive in 20% of tmor cells. No intestinal metaplasia. HP negat. in the material.

MRI of the face and neck, with contrast (Gadovist) (Conclusive Report provided by the client):
Tumor in the proximal part of esophagus, of size approximately 28x38mm (APxLL), 60mm in length. Its proximal part begins in the level od cartilago cricoidea, the lumen is deformed and stenotized. Anteriorly on the left there is another lesion with size 26x18mm (v.s. lymph node), that is in contact with posterior part of the left lobe of thyroid gland. Tumor is in contact with pars membranacea of the trachea, superficial infiltration can not be ruled out. Trachea is mildly deviated to the right.
There is no cervical lymphadenopathy.
Major salivary glands and thyroid gland without any pathomorfological findings.
Pharyngeal region unremarkable. There is mucosal thickening in the caudal part od maxillary sinus, other paranasal sinuses normal, withou any pathological content.
There are no suspisous lesions in bones.
Conclusion: Stenotising TU of the proximal part of esophagus with adjacent lymphadenopathy. Possible superficial infiltration of the pars membranacea of trachea.

CT Neck Thorax and Abdomen (native, arterial and venous phase):

There is a large tumor in the proximal esophagus with a total length of about 6cm and an axial diameter of up to 5cm. For the local details of the tumor see the MRI report. There might be infiltration of the cartilage cricoidea as well as the pars membranacea of the trachea. There is also a long standing contact to the thyroid gland. The trachea is slightly compressed from the left side.
There are enlarged lymph nodes in the upper abdomen near the aorta on the left side.
The lungs look normal beside some fibrotic changes. The liver is regular, also the bones and the other structures of the abdomen.

Conclusion:

Large tumor in the proximal esophagus – according to the imaging it is a T4b stage. Regarding the M and N staging I would wait for a PET/CT. There are enlarged lymph nodes near the aorta in the upper abdomen, which might result in a M1 stage if the PET is positive.

5. Treatment options

Statement by Prof. Prager:

For cervical squamous cell carcinoma N+ definitive chemoradiation is recommended, if no distant metastasis are detected (M0). Thus, I suggest to complete the staging with a (PET)-CT scan of the head, neck, thorax and abdomen first.

If the tumor is staged as N+ and/or T4b, I suggest to perform chemoradiation with cisplatin and fluorouracil:
e.g.
Cisplatin 75 mg/m² BSA over 2 hours i.v., day 1
5-FU 1000 mg/m² BSA over 24 hours day 1-4
Q=28 days, for 4 cycles

The first 2 cycles should be concomitant with radiotherapy to a total dose of 50.4 Gy (1.8-2.0 Gy/day).

Consider that dysphagia might occur, thus, PEG-tube implantation should be considered prior treatment. I recommend to do bronchoscopy first, to exclude trachea infiltration or partial obstruction.

A restaging CT-scan to evaluate treatment response should be performed after 2 cycles, e.g. 4 weeks after chemoradiotherapy.

This recommendation is in accordance to NCCN guidelines V3/2015;

Please be aware of the fact that the recommendation is a second opinion according to the provided results and might be different in an individual patient setting.

If there are any questions left, please do not hesitate to contacting me!

Sincerely!

Yours,
Prof.Dr. Gerald Prager

NB: (by Prof. Wolf after consultation with Prof. Prager): If the lymph node near the aorta in the upper abdomen is positive in PET/CT the prognosis is worse and the chemotherapy would be longer (4 cycles).

Statement by Prof. Kaczirek:

From the available information the patient has squamous cell carinoma of the cervical esophagus beginning at the level of the cricoid as stated in the MRI report. We recommend to additionally perform a whole body (PET)/CT scan to exclude distant metastases.
If there are no distant metastases, according to current guidelines (NCCN) cervical or cervicothoracic esophageal carcinomas <5 cm from the cricopharyngeus should be treated with definitive chemoradiation. Palliative esophagectomy can be considered for patients with cervical esophageal cancer who develop localized, resectable esophageal recurrence or untreatable stricture after definitive chemoradiation if there is no distant recurrence.
A surgical approach is mutilating and survival rates are not improved compared to definitive chemoradiation. Thus, we cannot recommend surgery in this situation.
Percutaneous endoscopic gastrostomy (PEG) should be considered before definitive chemoradiation is started because nutrition might become a problem and placement of a PEG probe may be difficult when the tumor stenosis increases.

Yours Prof. Kaczirek

6. Conclusion/decision

According to the guidelines and the advice by Prof. Prager and Prof. Kaczirek the best treatment option would be a chemotherapy combined with a radiation as mentioned above.

7. Advice

First of all, for a definitive staging, I recommend to do a PET/CT Scan in order to exclude or prove pathological lymph nodes or metastases.
Depending on the result of the PET/CT scan I would start a chemoradiatio. According to recent guidelines a surgical resection would not result in a better survival. Moreover the morbidity of such a radical resection would be very high (as described also by the patient himself).

If you have any further questions please feel free to contact me again!

Best regards,

Florian Wolf