Squamous cell carcinoma of the head and neck: ESMO Clinical Recommendations for diagnosis, treatment and follow-up

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incidence
The crude incidence of squamous cell carcinoma of the head and neck (SCCHN) in the European Union is 34.6/100,000/year, mortality is 13.7/100,000/year. More than 90% of head and neck malignancies are squamous cell carcinomas.

diagnosis
Pathologic diagnosis should be made according to the WHO classification from a surgical biopsy sample.

staging and risk assessment
Routine staging includes physical examination, chest X-ray, head and neck endoscopy, and head and neck CT scan or MRI. A thoracic CT scan may be carried out to rule out metastatic disease.

Squamous cell head and neck cancer should be staged according to the TNM system and grouped into the following categories (Table).

T4 tumors are subdivided into T4a resectable and T4b unresectable. Stage IV is subdivided into stages IVA and IVB accordingly, and stage IVC for metastatic disease.

treatment plan
A multidisciplinary treatment schedule should be established in all cases. The patient’s nutritional status must be corrected and maintained. Dental rehabilitation is indicated before radiotherapy.

reseactable tumors
Treatment depends on primary tumor location and extension.

In early stage (I–II), either surgery or radiotherapy (external radiotherapy or brachytherapy) gives similar locoregional control. However, this is based only on retrospective studies as there are no randomized trials available for reference.

Standard options for advanced resectable tumors are surgery plus postoperative radiotherapy, and for those patients found at surgery to have high-risk features (extracapsular extension and R1 resection) postoperative chemoradiotherapy with single-agent platinum [I, A].

The role of induction chemotherapy has been reconsidered since the introduction of taxane/platinum-based combinations. However, at present, neoadjuvant therapy is not considered standard treatment in resectable disease.

Resectable tumors can also be treated with altered fractionated radiotherapy (i.e. hyperfractionation, accelerated fractionation) and/or concurrent chemoradiotherapy alone as an organ preservation strategy. Neoadjuvant chemotherapy followed by radiotherapy allows for organ preservation in advanced larynx and hypopharynx cancer in patients otherwise requiring total laryngectomy [I, A]. This treatment option has no impact on disease-free or overall survival [I, A]. In one randomized trial, concurrent chemoradiotherapy achieved higher larynx preservation rates.

unresectable tumors
Concurrent chemoradiotherapy is the standard treatment option. This modality is superior to radiotherapy alone for response rate, disease-free and overall survival, albeit at the cost of increased toxicity [I, A].

Platinum-based regimens remain the standard chemotherapy for concurrent chemoradiotherapy [I, A].

In recent years, two new treatment options have emerged. Radiotherapy given concomitantly with cetuximab has demonstrated a higher response rate, longer disease-free progression and longer overall survival versus radiotherapy alone [I, A]. At present, radiotherapy given concomitantly with cetuximab can be considered for those patients unfit for...
chemotherapy. Induction chemotherapy with cisplatin/5-fluorouracil/docetaxel followed by radiotherapy alone, or by chemoradiotherapy leads to higher response rates, longer disease-free progression and longer overall survival versus a cisplatin/5-fluorouracil regimen given as induction treatment and followed by the same local therapies [I, A].

local regional and metastatic recurrence

In selected cases of localized recurrence, surgery (if operable) or re-irradiation can be considered. For most patients palliative chemotherapy is the standard option. Weekly methotrexate may be considered as the accepted treatment [I, B]. Although combination chemotherapy (cisplatin, 5-fluorouracil or taxanes) produces higher response rates than single-agent methotrexate, no survival benefit has been demonstrated [II, B]. In a recent, as yet unpublished study, in patients unsuitable for local therapy, the addition of cetuximab to cisplatin or carboplatin plus 5-fluorouracil resulted in longer survival.

follow-up

Treatment response should be evaluated by clinical examination and CT scan or MRI of head and neck depending on the initial procedure. The optimal approach to the post-treatment surveillance of patients with SCCHN is still under discussion. The aim of follow-up is the early detection of potentially curable locoregional recurrence and second tumors. Physical examination along with radiologic imaging should be included in the follow-up. At this time, special attention should be paid to the treatment sequelae. Chest X-ray may be included. Evaluation of thyroid function in patients with irradiation to the neck is recommended at 1, 2 and 5 years.

levels of evidence [I–V] and grades of recommendation [A–D]
as used by the American Society of Clinical Oncology are given in square brackets. Statements without grading were considered justified standard clinical practice by the experts and the ESMO faculty.

literature