

Martina Pagliuca, M.D.

Medical Oncology Division, Department of Clinical Medicine and Surgery
University Federico II of Naples, Italy

Head and Neck Cancer: a multidisciplinary approach

DISCLOSURE OF INTEREST

No conflicts of interest to declare

Background

- 32 years old man, no comorbidities. ECOG: 0.
- Medical history: non-smoker, no habit of drinking alcohol.
- In June 2018 he noted the appearance of rhinorrhea from the left nostril and nasal congestion, until the loss of fleshy material from the left nostril.

Pathology: squamous cell carcinoma G3

Histological review: poorly differentiated non-keratinizing carcinoma

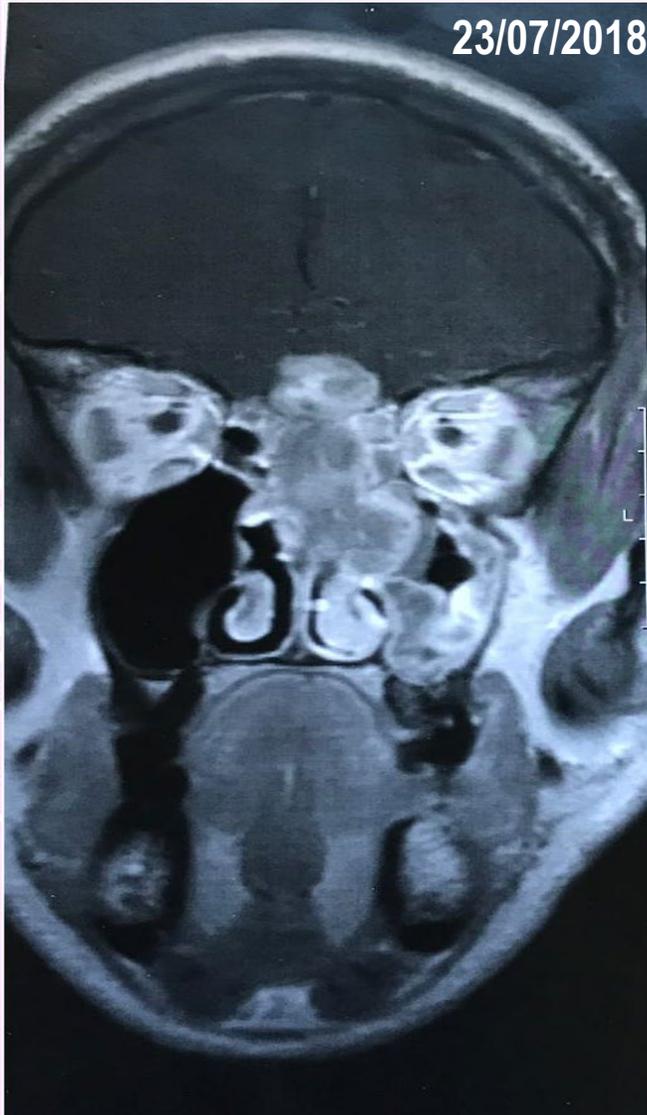
- Head and neck MRI with contrast and total body CT with contrast: *left nasal cavity neoplasm extended to contralateral nasal cavity through nasal septum lysis, protruding laterally toward the left maxillary sinus and the left orbital medial wall and reaching, across an osteolysis of the ethmoidal cribriform plate, the anterior cranial fossa where an extra-axial nodule was present.*
- Clinical and radiological staging: absence of nodal or distant metastases.

Multidisciplinary treatment schedule

Diagnosis: Ethmoid left SNUC with intracranial extension T4aN0M0
Stage IVA

- ⊙ Taxane-platinum-based induction chemotherapy followed by:
 - Combined concomitant chemoradiation
 - or
 - Surgery plus post-operative chemoradiotherapy.

Chemotherapy outcome



TPF x 3 cycles q21 from August 2018.

AEs: nausea G2, alopecia G2.

ECOG:0

Radiological assessment

- MRI: impressive reduction of the neoplasm with inflammatory tissue.
- PET/TC: no radiotracer uptake.



Multidisciplinary treatment schedule (2)

- ◉ **Hadrontherapy** proposed in view of histological type and site of disease, close to non-target critical structures.
- ◉ Meanwhile 2 more cycles of TPF administered.
- ◉ Baseline assessments: ophthalmological tests (visual acuity, fundus, Hess-Lancaster, field of vision), audiometry, hypothalamic-pituitary function tests and dental evaluation.
- ◉ Boost with carbon ions (15 Gy/5 fractions) plus proton radiation therapy (60 Gy/30 fractions) with IMPT (Intensity Modulated Particle Therapy) technique (ended on February 2019).
- ◉ AEs: nasal and oral mucositis G1, erythema G1 of the neck and face.

Hadrontherapy outcome



Radiological assessment

- MRI with contrast: absence of residual disease; mucous secretion into the paranasal sinuses.

Subacute toxicity: dry mouth G1.

Endoscopic examination, endocrine function tests, audiological and ophthalmological exams scheduled.

Follow-up

Conclusions

Uncommon
histology

Challenging
location

Step-by-step
management

- ⊙ This is an emblematic case of how patients could benefit from a multidisciplinary assessment for therapeutic decision-making.
- ⊙ The aim of the multidisciplinary team should be the optimization and personalization of the treatment in order to offer an ever more tailored therapy to all patient.
- ⊙ The management of these patients has peculiar features, only the multidisciplinary team has the expertise to offer an adequate therapy, nutritional evaluation, palliative care, psychosocial assessment and support to each patient.

Thank you for your attention!

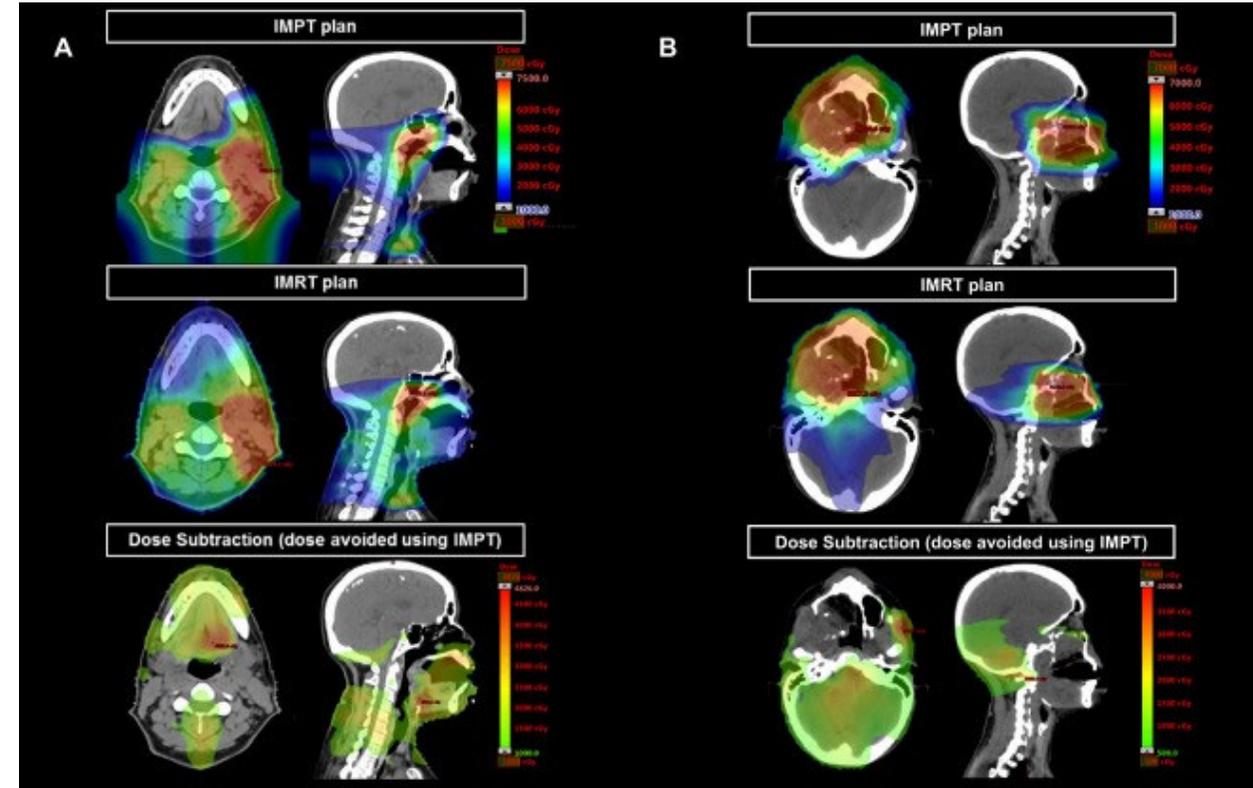
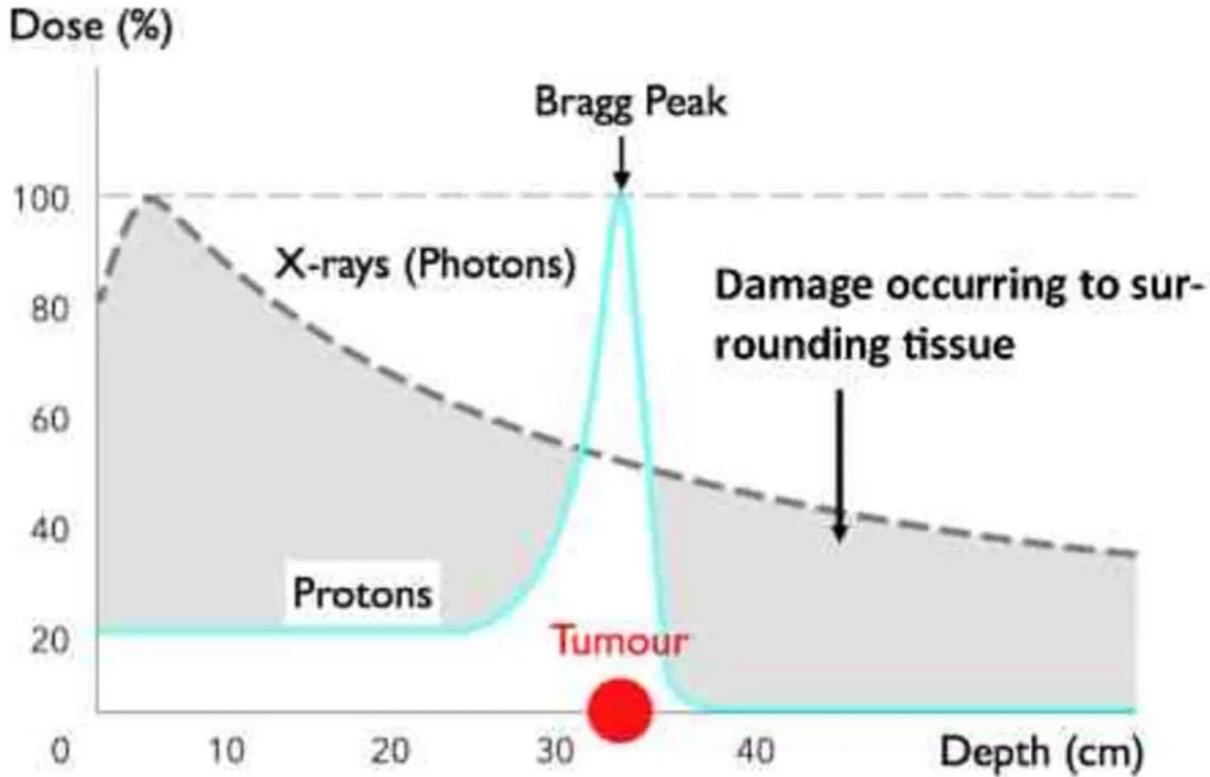
Acknowledgments:

- *Prof. De Placido S.*, director DAI Oncology, Hematology, Radiology,, Pathology and Forensic Medicine, A.O.U. "Federico II", Napoli
- *Dr. Matano E. and Damiano V.*, Medical Oncology, A.O.U. "Federico II", Napoli
- *Dr. Solla R.*, Radiotherapy, A.O.U. "Federico II", Napoli
- *Dr. Ronchi S.*, CNAO (Centro Nazionale di Adroterapia Oncologica), Pavia
- *Prof. Piazza C.*, Fondazione IRCCS - Istituto Nazionale dei Tumori, Milano

Backup slide

Advanced Oncotherapy

Blanchard P et al. Proton Therapy for Head and Neck Cancers. *Semin Radiat Oncol.* 2018



- ⊙ The dose depth distribution for proton therapy is characterized by a sharp increase in dose deposited at the end of the particle range, the Bragg peak, sparing normal tissue distal to the tumor target from incidental irradiation.