LOW GRADE NON-INTESTINAL TYPE SINONASAL ADENOCARCINOMA PRESENTING AS AN ORBITAL MASS

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BACKGROUND

Non-intestinal type sinonasal adenocarcinoma (non-IT SNAC) is a non-salivary type adenocarcinoma lacking intestinal features and possibly originating from sinonasal seromucous glands.

These tumors do not show gender or racial predilection, are more common after the age of 50, and may arise anywhere in the sinonasal tract.

Nasal cavity is most commonly affected, followed by ethmoid and maxillary sinuses.

We report the first case of non-IT SNAC presenting with ocular symptoms.
METHODS

- 72-year old woman
- decrease of vision in her right eye since 6 months, followed by a sudden visual loss
- ductal breast carcinoma, G3, pT2pN0pMX 9 years before
- high grade bilateral anosmia since 2 years
CT & MRI

Solid, highly vascularized mass of the sphenoidal sinus and nasal roof, permeating ethmoidal cells and posterior orbit with bone thinning and erosion but without true bone invasion.
Fluid level in the sphenoidal sinus
The lesion wrapped around the optic nerve, without infiltration.
RESULTS

Soft, reddish tissue fragments were removed through a right supraorbital approach.

Microscopy showed a neoplastic growth of tubulocystic glands, cuboidal cells, without atypia or necrosis, and few mitoses. Cells were CK7+, TTF1+, S-100+, and CK20, CDX-2, EMA, p63, CK34bE12, GCDFP-15, ER, PR, c-erbB2, GFAP negative. MIB-1 index was 5%.
S100

EMA
p63, CK 34βE12
GCDFP-15, ER, PR, c-erbB2
GFAP
The final diagnosis was **low-grade nonintestinal type adenocarcinoma of the sinonasal tract** invading the orbit.
Glandular malignancies of the sinonasal tract comprise a wide spectrum of pathologic features. Although some primary adenocarcinomas resemble salivary and intestinal neoplasms, the morphologic heterogeneity of others preclude precise definition.
The morphologic heterogeneity of non-ITACs precludes their precise definition, often resulting in uncertainty that makes them a **diagnostic category of exclusion**.

Immunohistochemical profile (CK7+, CK20-, CDX-2-) may be of help in confirming the diagnosis that is not ruled out by **TTF-1** positivity, as reported in literature.
The typical presentation is that of a painless, slowly growing mass, causing unilateral epistaxis or nasal obstruction. To the best of our knowledge, this is the first case presenting with monolateral progressive visual loss, even though nasal symptoms were neglected in the past medical history of the patient.

Non-ITACs are usually treated by complete surgical excision, and cases with high histologic grade and/or extensive disease requiring adjunctive radiotherapy. A correct pre-operative diagnosis is of paramount importance to assure an adequate treatment to the patient, as well as intraoperative consultation should be limited to margins assessment.
REFERENCES

Weinreb I. Low Grade glandular lesions of the sinonasal tract: a focused review. Head Neck Pathol 2010; 4: 77-83.