Adenocarcinoma of Nasal Pits Rare Location about a Case

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Abstract:- Primary adenocarcinomas of the sinuses and nasal pits are rare tumors, accounting for 13% of nasosinusian carcinomas. We report in this work the observation of a young patient with no notable pathological history who presented one year prior to his consultation a history of right unilateral nasal obstruction associated with a history of low homolateral abundance epistaxis. Clinical and endoscopic examination objectified a red polypoid formation occupying the majority of the right nasal cavity; on data from nasal imaging and endoscopy; the tumor is classified as T1N0M0; the patient benefited from an endoscopic first with a homolateral middle meatotomy; the anatomopathological study objectified low-grade adenocarcinoma. Post-operative surveillance based on nasal endoscopy and imaging did not show signs of recurrence.

I. INTRODUCTION

Adenocarcinoma originates in the glandular cells of nasal pits or paranasal sinuses. This type of tumor is most commonly seen in the upper nasal cavities and ethmoid sinuses. Adenocarcinoma can develop slowly (low grade) or rapidly (high grade). Most adenocarcinomas of nasal pits or paranasal sinuses are diagnosed in men and are strongly associated with exposure to wood dust. Primary adenocarcinomas of the sinuses and nasal pits are rare tumors, accounting for 13% of nasosinusian carcinomas. The latest WHO 2005 classification distinguishes two types: intestinal type adenocarcinomas (ACTs) and non-intestinal types, mainly represented by low-grade adenocarcinomas.

We report in this work the observation of a 38-year-old patient who presented in a table of low abundance individuals repeated unilaterally with homolateral nasal obstruction.

II. CASE REPORT

This is a 37-year-old patient with no notable pathological history, occupation trader with a history of straight unilateral nasal obstruction and a repeated low abundance epistaxis for a year; without other rhinological or associated ophthalmological signs.

The clinical examination finds, on the general level a patient was in good hemodynamic state slightly discolored with anemia at 10, on the rhinological plane, the examination did not find deformation of the nasal pyramid or the nasogenian furrow with a nasal flow decreased to the right relative to the left side where it was preserved, at the nasal endoscopy an inflamed nasal mucosa was objectified with the presence at the right nasal cavity of a polypoid formation with a base of implantation at the middle meat level, the cavum is free.

The rest of the clinical examination was normal, no palpable cervical adenopathy.

The injected naso-sinusian scanner objectified a mass of tissue density at the middle meat of the bulging right nasal cavity in the choanas exerting a mass effect on the sinus. Right maxilla with deviation from the media wall.(figure1.2)
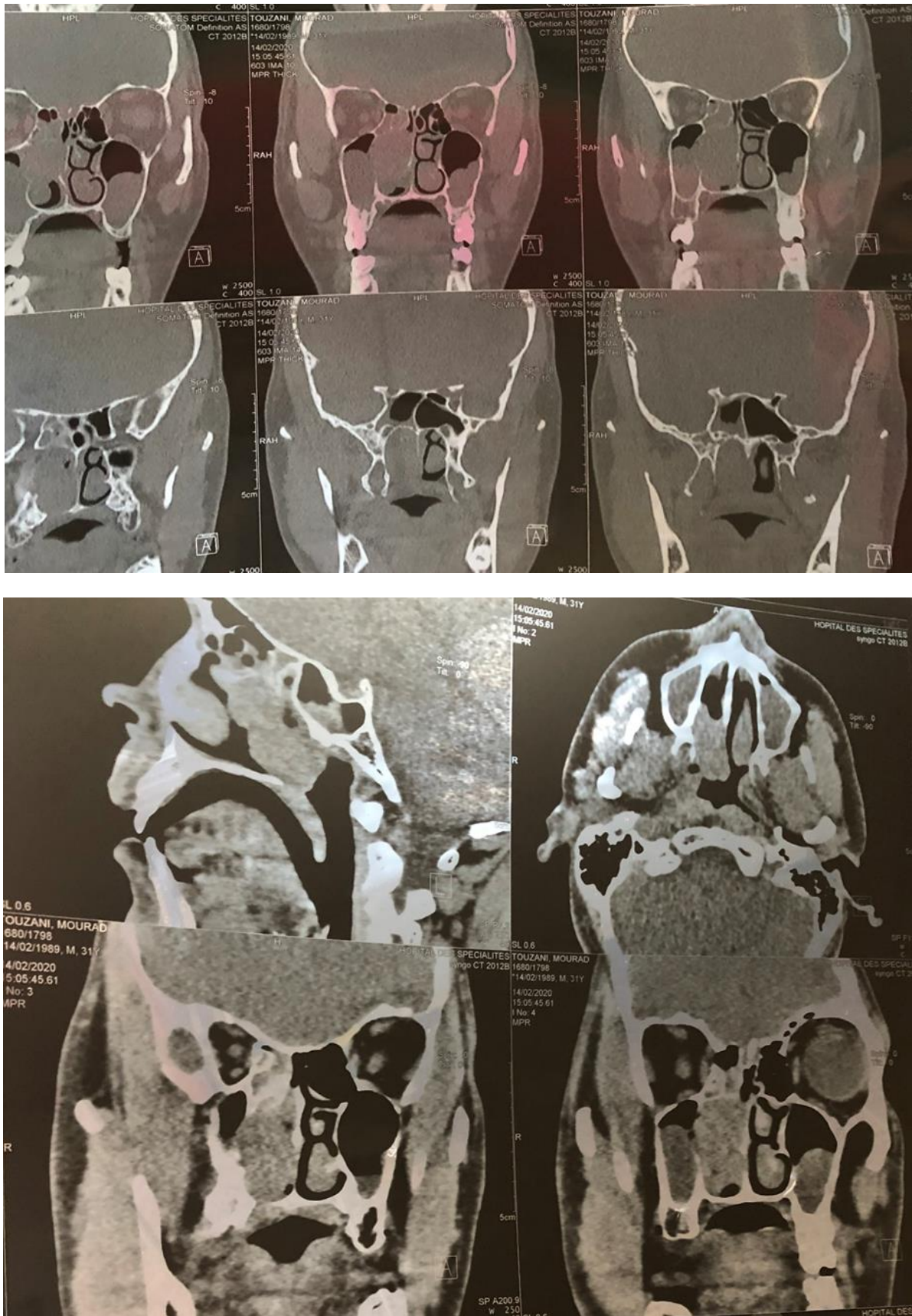
Figure 1 and 2: coronal and axial cuts of the patient's nasosinusian CT disease showing tissue density mass at the right nasal cavity.

III. DISCUSSION

Sino-nasal malignancies account for 20% of these cancers in the literature. They develop at the ethmoid, 30% in the maxilla infrastructure, 40% in the maxillary sinus, 10% in the nasal pits (1.2.3). Adenocarcinoma originates in the glandular cells of the nasal pits or paranasal sinuses exactly from the gland overlapping cells. This type of tumor is most commonly seen in the upper nasal cavities and ethmoid sinuses. Adenocarcinoma can develop slowly (low grade) or rapidly (high grade). (2)

In most series, the age pyramid is not available. Only the average age at the time of diagnosis is most often cited: all authors find it around 60 years. The weakest extreme ages are to our knowledge 22, 31 and 37 years. The number of patients under the age of 40 is most often absent. The age pyramids available among the different historical series show that the vast majority of patients with this pathology are grouped between the 4th and 8th decade of life. (2.7)

The role of wood dust in the carcinogenesis of ethmoid tumors was mentioned by Mourre and Portman in 1923. The International Agency for Research on Cancer in 1995 concluded the causal relationship between exposure to wood dust and Nasosinusian cancer and classified wood dust as a group 1 of carcinogens, such as the European Union. There is also a high incidence relative to the general population of adenocarcinoma in people exposed to leather treatments. Nickel was the first carcinogen described to be responsible for ethmoid adenocarcinoma in 1963. Effective occupational prevention measures have made this cause of ethmoid adenocarcinoma rare. Latency is reported in varying degrees between 10 and 30 years from the end of exposure to the first symptoms. Latency times can also be calculated from the first day of exposure, on average 40 years, but with extremes ranging from 7 to 70 years. (2)

The main purpose of the CT-MRI imaging assessment is to determine the best therapeutic strategy (4). Once the histological nature is established on biopsy, non-surgical tumors are directed to chemo and/or radiotherapy management. Tumor mapping helps define the operational tactic (first single or double path, extension to the orbit, the palate...). It gives the location, volume and extensions of the tumor and allows to establish the parameters of irradiation for radiotherapy. It also serves as a reference to assess the tumor response to treatment (4).

Histologically; A wide variety of tumors are likely to develop in this site, where multiple epithelial, glandular, conjunctiva, lymphoid or nerve histological structures are normally present (5, 6). Only an anatomopathological examination of the biopsy or the piece of exesesis can make the diagnosis. Epithelial tumors are distinguished from non-epithelial tumors. (5.6).

They are predominant in the ethmoidal sinus and at the upper nasal passages. Macroscopically: Adenocarcinoma presents itself as a very limited tumor, rounded with an ulcerated surface. At the cut, it is white-grey with sometimes the presence of cystic formations. These are soft, crumbly tumors that bleed easily, sessile or pediculated. They can take on the deceptive aspect of a banal polyp (7). In microscopy: the majority of cylindrical adenocarcinomas are intestinal. Their architecture is variable, often polymorphic: tubular, papillary, micro cystic, or massive and containing mucoscreating cells in varying numbers. The classifications of these tumors in the literature reflect the polymorphism of these tumors. The WHO 2005 classification distinguishes between intestinal adenocarcinomas (ITAC) and low-grade non-intestinal adenocarcinomas, two entities with different epidemiological, clinical and prognostic characteristics. Low-grade adenocarcinomas retain a respiratory type phenotype (CK20-/CK7-/CDX2-/villine-) while ITACs have an intestinal morphology and phenotype (CK20-/CK7-/CDX2-/villine). The histological, ultrastructural and phenotypic similarities between ITAC and colorectal adenocarcinomas raise the possibility of close carcinogenesis mechanisms. However, the literature review shows often contradictory results, suggesting a different pathogenesis. Differential diagnoses of primitive adenocarcinomas of the sinuses and nasal pits are represented by the other glandular lesions encountered in this topography: the adenomoid epithelial hamartoma, inverted schneiderian papillomas, adenocarcinomas developed at the expense of accessory salivary glands and more rarely otherwise metastases of adenocarcinomas. (1)

The prognosis of the disease is not statistically related to the duration of exposure to wood dust, nor to the age or sex of the patients. There is no survival difference between high- and low-grade forms, between well- and little-differentiated forms, mucoid, papillo-tubular and papillary intestinal forms. The prognostic value of the histological type is not determined for the colloid type (mucinux) and cells in chestnut rings. The prognosis of the disease is related to local recurrences and not to distant metastases. The tumor stage is a prognostic factor. Brain and brain extension is the most important risk factor for recurrence. The rare lymph node extension, as well as the invasion of the basifrontal canal and frontal sinus are factors that adversely influence survival. Tumor extensions to the orbit, sub temporal pit and sphenoid sinus are not routinely considered as factors of poor prognosis.

The treatment meets several objectives:
- First, and where possible, the eradication of cancer.
- To try to detect and treat a possible recurrence.
- Restore function and aesthetics.
- Ensure psychological care and follow-up of the patient.

It appears that the combination of surgery followed by radiotherapy is the standard treatment for facial mass adenocarcinomas (grade C).

Conformational techniques with at best intensity modulation appear to be current techniques to reduce the side effects of radiotherapy in patients treated with postoperative irradiation for adenocarcinoma (grade B).

Neoadjuvant chemotherapy does not provide a gain in terms of specific overall survival and no recurrence at 5 years (grade C). On N: There is no indication for a prophylactic lymph node gesture in patients. Clinical and radiological n0. For the few patients with lymph nodes at the time of diagnosis a radical homolateral modified cervical recess followed by cervical radiotherapy is most often proposed. On M: Patients are cared for with a systematic palliative purpose.

In the case of operable tumor: total macroscopic and microscopic exeresis surgery with safety margins followed by radiotherapy on the tumor bed is the standard treatment for the curative adenocarcinomas of the ethmoid. (Grade C) There is no standard first. Exeresis can be done by a craniofacial, trans-facial or possibly by endonasal endoscopic surgery. Exeresis surgery must include rehabilitation procedures.

Some T1 and T2 lesions can be treated by surgery alone provided a resection in healthy, broad limits, away from the noble neighboring organs and subject to patient compliance with rigorous post-therapeutic monitoring. These indications should be discussed on a case-by-case basis in CPR (professional consensus). There is no indication of surgical prophylactic or radiotherapy treatment on the lymph node areas of N0 patients regardless of the tumor stage. (Grade B). If the tumor is inoperable, the treatment is multimodal and should have the appropriateness of concurrent radiation therapy or neoadjuvant chemotherapy followed by radiotherapy on a case-by-case basis, taking into account the morbidity of the different treatments, the patient's age and his Karnowsky index. (2)

IV. CONCLUSION

Advances in imaging and anatomopathological techniques make it possible to get as close as possible to the nature and extension of these tumors, in order to adapt the treatment as much as possible. In terms of therapeutics, the various medical and surgical techniques, often associated, allow to propose solutions adapted to the characteristics of adenocarcinomas and patients, trying to keep maximum efficiency and repair defects.

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