

Low-Grade Non-Intestinal Type Adenocarcinoma of the Nasopharynx: A Rare Entity Outside the Current WHO Classification

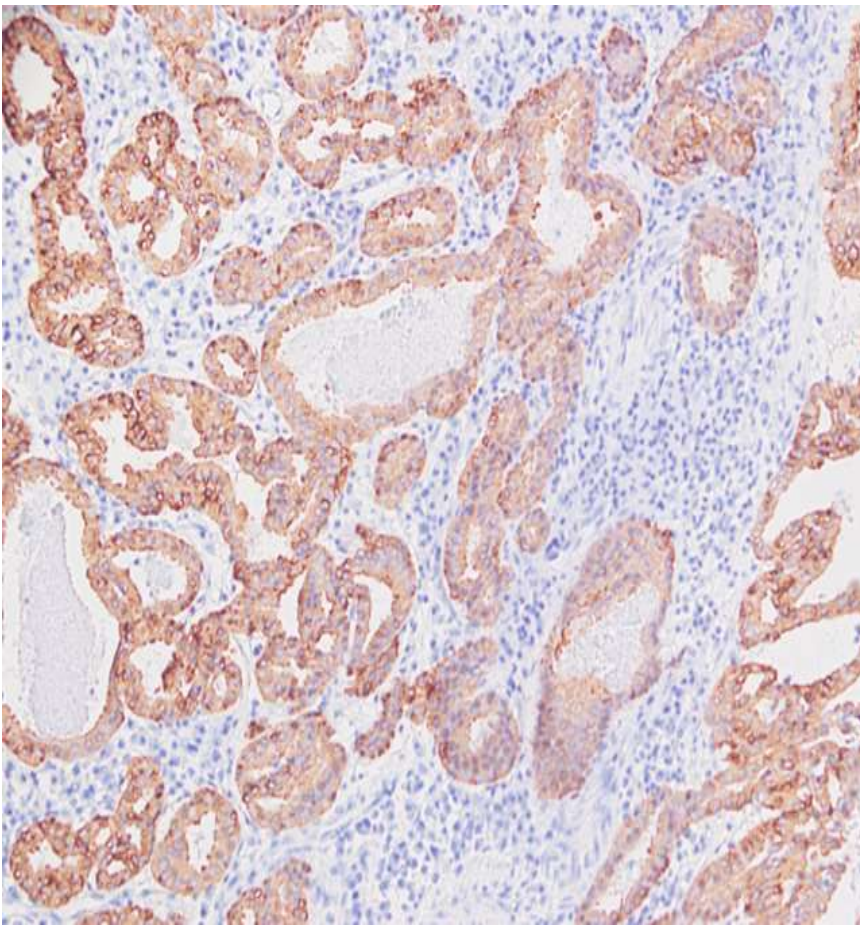
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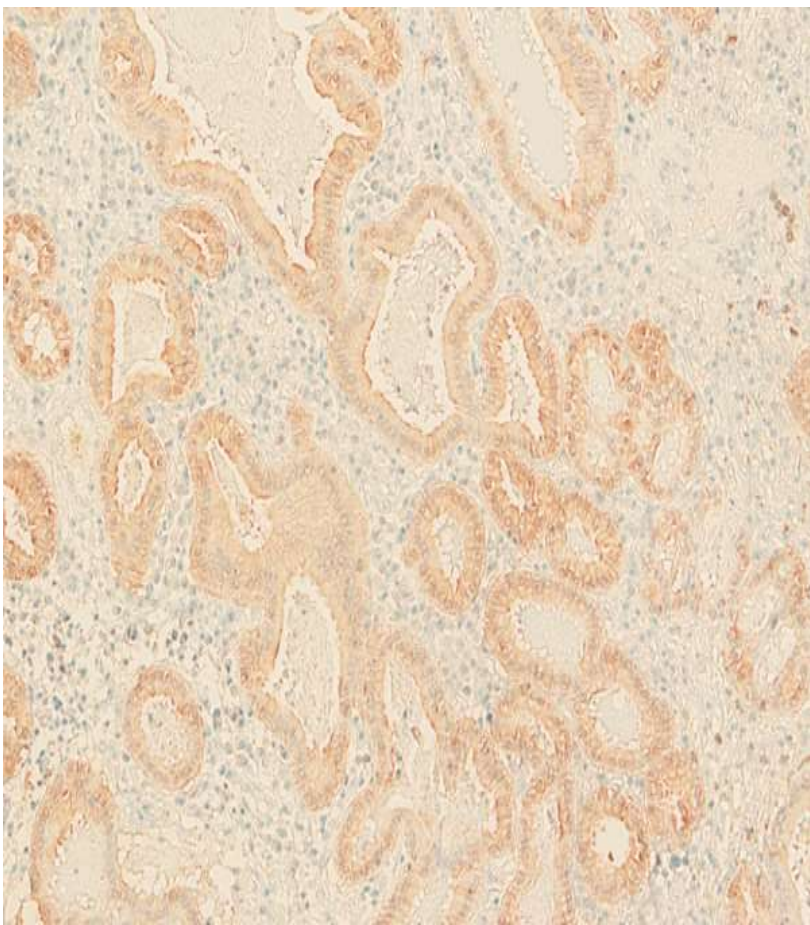


BACKGROUND

- Non-intestinal type adenocarcinoma (NIA) is a rarest epithelial malignancy, usually arising in sino-nasal tract.
- Primary nasopharyngeal involvement is exceedingly uncommon.
- Diagnosis requires correlation of histopathology and IHC to exclude intestinal-type, salivary gland-type and metastatic adenocarcinomas.



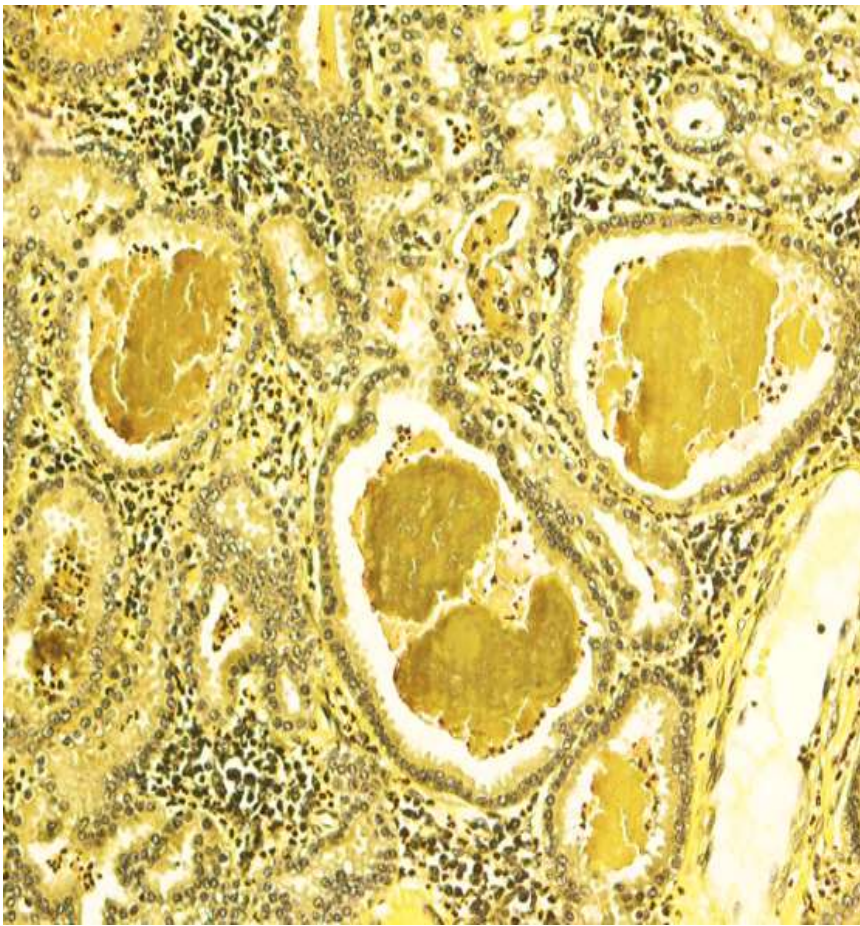
IHC for cytokeratin 7+ showed diffuse cytoplasmic positivity



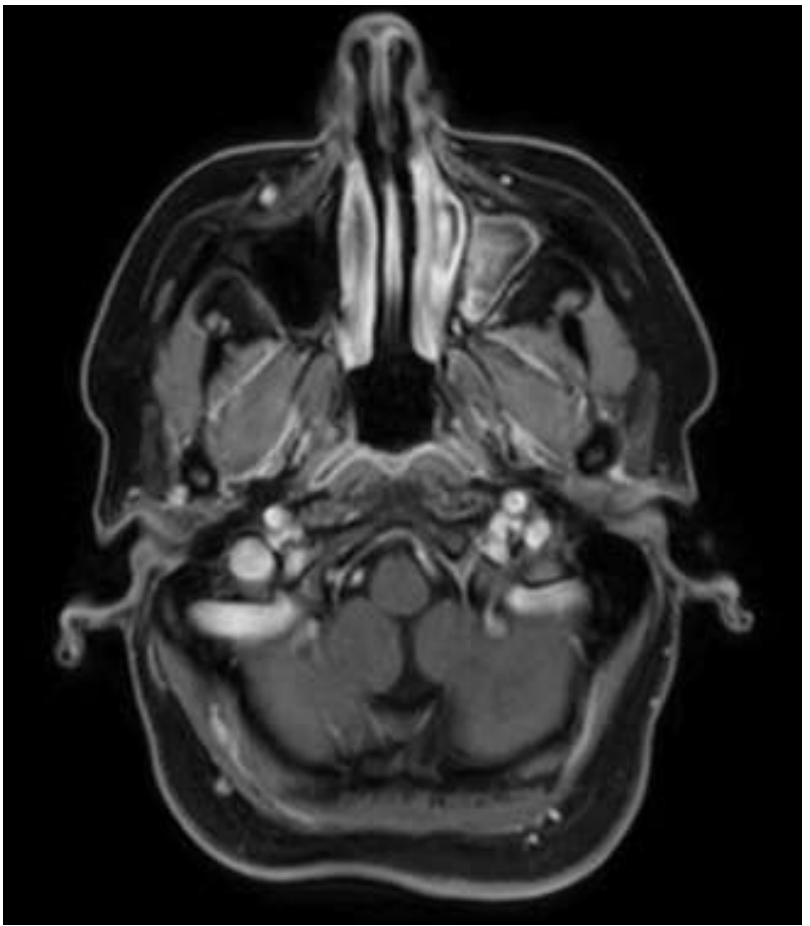
IHC for S-100 showing focal to moderate positivity

CASE SUMMARY

- A 34-year-old woman presented with several months of Intermittent nasal obstruction, sensation of head heaviness and single episode of epistaxis, with no significant past medical Hx/ occupational / environmental/ viral exposure.
- **Baseline CT** showed a left nasopharyngeal soft-tissue mass, without reported bony erosion or cervical lymphadenopathy.
- **Endoscopic piecemeal excision & H/P** showed a malignant neoplasm composed of complex glandular architecture lined by columnar epithelial cells, with no high-grade malignancy found.
- **Immunohistochemistry** showed diffuse **cytokeratin 7+**, **cytokeratin 20–** and **mucin expression**, along with focal to diffuse **S-100+**, supporting a **non-intestinal respiratory-type phenotype**.
- Given the low-grade histology, uncertain surgical margins following piecemeal excision, and anatomical limitations to further surgery, multidisciplinary **Head & Neck Tumor Board** decided to proceed with definitive radiotherapy.



Mucin stain confirming neoplastic glandular epithelial cells



Follow up MRI – Patent Nasopharyngeal airway

TREATMENT

- The patient received 54 Gy in 30 fractions to the primary site with elective irradiation of the neck.
- Radiotherapy was well tolerated.

FOLLOW UP

- **Follow-up MRI** demonstrated no evidence of residual or recurrent disease at the primary nasopharyngeal site (Figure 4).
- The patient is currently in her fifth year of follow-up and remains clinically well, with ongoing annual MRI, six-monthly clinical assessments, and regular fiberoptic nasopharyngolaryngoscopy.

KEY TAKEAWAYS

- ✓ Consider rare histologies when a nasopharyngeal mass demonstrates glandular morphology.
- ✓ IHC is crucial for distinguishing NIA from intestinal-type, salivary gland-type and metastatic adenocarcinomas.
- ✓ When complete resection is not feasible, definitive radiotherapy may provide effective disease control in selected low-grade tumors.
- ✓ Long-term follow-up and continued reporting of such rare cases are essential to improve understanding and guide management.

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