Disclosure Information

I hereby declare that I have had business or personal interests in the following industrial enterprises since 1 September 2016:

<table>
<thead>
<tr>
<th>Name of the enterprise / Nature of the interest</th>
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Understanding diseases through the "big eye": An ultrastructural pathology seminar by pathologists in training

Case 4
Clinical Presentation

• 29 year old male

• 3 cm. lesion located in the superficial lobe of the right parotid gland

• In the same surgical procedure, a follicular adenoma of the thyroid was also removed

• A II level lymph node was negative
Which is the diagnosis?
SECRETORY CARCINOMA OF SALIVARY GLAND OR MAMMARY ANOLOGUE SECRETORY CARCINOMA (MASC)

- Young adults, mean age 46 years
- Equal sex distribution
- Parotid gland, oral cavity and submandibolar gland
- Painless, slow-growing mass
- From 0.2 to 5.5 cm in size
Histopathology

- Circumscribed or infiltrative
- Lobulated growth pattern with fibrous septa
- Microcystic-solid, tubular, follicular and papillary-cystic
- Vacuolated or granular cytoplasm
- Bland looking, vesicular nuclei
- Intracytoplasmic or intraluminal electrondense, colloid-like material with bubbly appearance
**Immunohistochemistry**

- **Positive stains:**
  S100, GCDFP-15, mammoglobin, vimentin, CK 7,8,18,19, AE1-AE3, CAM5.2

- **Negative stains:**
  Dog1, ER, PR, p63, calponin, SMA, CK5/6, CK14
Genetic profiles

t(12;15)(p13;q25) → ETV6-NTRK3 fusion gene

ORIGINAL ARTICLE

“Mammary Analogue Secretory Carcinoma of Salivary Glands”


Alena Skalova et al.

Electron Microscopy


Julie Guilmette et al.

Received: 2 December 2016 / Accepted: 30 January 2017

Acinic cell carcinoma classic variant, acinar cell type

Secretory carcinoma striated duct cell type
Electron Microscopy

- **Type 1**: striated duct cells
- **Type 2**: intercalated duct cells
- **Type 3**: acinar cells (minor component)

Differential diagnosis with Acinic cell carcinoma
Differential diagnosis

- Acinic cell carcinoma
- Adenocarcinoma NOS
- Mucoepidermoid carcinoma
- Low grade cystoadenocarcinoma
- Signet ring cells adenocarcinoma
Treatment and prognosis

• Local excision
• Radiotherapy in selected cases
• Molecular target therapy (ETV6-NTRK3)
• Cervical lymph nodes metastases 25%
• Distant metastases are rare
• High grade transformation, MASC with atypical molecular features, and high clinical stage represent adverse prognostic factors
Thank you for your attention