In Reply: Colonic-Type Adenocarcinoma of the Tongue and Oral Cavity (CATOC)

Abbas Agaimy¹

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Dear Editor,

I would like to thank Dr. Bell for her interest in my letter-to-the-editor published recently in Head and Neck Pathology on colonic-type adenocarcinoma originating in the tongue and oral cavity (CATOC) [1]. The two aims of my recent letter were (1) To draw attention of the readers of the journal and the authors of recently published similar case reports to the very first description of that entity which was published a decade ago as Dr. Bell pointed out [2]; and (2) to address the issue of histogenetic origin of these unusually located rare neoplasms in the light of recently reported cases.

Although it is understandable that the group of Dr. Bell might have overseen the first report on CATOC from 2007 [2], though quoting a similar paper published a couple of months thereafter by Volchok et al. [3], Dr. Bell did not make any reference or explanation to this point in their current letter. Furthermore, Dr. Bell's letter argues against a universal origin of CATOC from pre-existing dysontogenetic embryonic or choristomatous tissues, although accepting the case reported by Volchok as evidence for such an origin in at least a subset of cases [4]. Taken together, origin of CATOC from well documented embryonic duplications/remnants or teratoid cysts was evident in two of the eight reported CATOC cases [1, 3]; a third case was reportedly grossly cystic although not further commented in the histological findings [5].

An important point highlighted by Dr. Bell's letter is the novel retrospective illustration of unequivocal origin of one of their two CATOC cases from duct-like cystic structures lined by respiratory-type epithelium with transition to dysplastic intestinal-type epithelium expressing CK20 [4]. This finding, which has not been depicted in the original publication by Bell et al. [6] is strikingly reminiscent of the ciliated epithelium illustrated in the report by Agaimy et al. which also was replaced in areas by dysplastic adenoma-like epithelium in that case [2]. The organoid appearance in the new Figure B and C in Bell's letter is more suggestive of embryonic structures rather than normal ducts as these cystic glands are not shown to be centered within salivary gland lobules, thus further supporting origin of CATOC from pre-existing embryonic tissue. As such cystic glands might represent no more than microscopic remnants (as retrospectively depicted from Dr. Bell's case obviously after serial sectioning), the whole lesion/neoplasm might not be grossly cystic highlighting the need for thorough sampling and/or serial sectioning supported as necessary by use of ancillary stains to highlight potential precursors or embryonic structures/remnants as pointed out by Dr. Bell [4].

References

1. Agaimy A. Colonic-type Adenocarcinoma of the tongue and oral cavity (CATOC). Head Neck Pathol. 2017. <https://doi.org/10.1007/s12105-017-0843-9>.
2. Agaimy A, Raab B, Bonkowsky V, Wunsch PH. Intestinal-type adenocarcinoma arising in a congenital sublingual teratoid cyst. Virchows Arch. 2007;450:479–81.
3. Volchok J, Jaffer A, Cooper T, Al-Sabbagh A, Cavalli G. Adenocarcinoma arising in a lingual foregut duplication cyst. Arch Otolaryngol Head Neck Surg. 2007;133:717–9.

✉ Abbas Agaimy
abbas.agaimy@uk-erlangen.de

¹ Institute of Pathology, Friedrich-Alexander University
Erlangen-Nuremberg, Krankenhausstrasse 8-10,
91054 Erlangen, Germany

4. Bell D. Response to “Colonic-type Adenocarcinoma of the tongue and oral cavity (CATOC)”. *Head Neck Pathol*. 2017. <https://doi.org/10.1007/s12105-017-0843-9>
5. Smith SM, Old M, Iwenofu OH. Primary lingual colonic-type adenocarcinoma: A rare and emerging distinct entity! *Head Neck Pathol*. 2017;11:234–9.
6. Bell D, Kupferman ME, Williams MD, Rashid A, El-Naggar AK. Primary colonic-type adenocarcinoma of the base of the tongue: a previously unreported phenotype. *Hum Pathol*. 2009;40:1798–802.