Eagle Syndrome: An incidental finding in a patient with craniomandibular dysfunction

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INTRODUCTION
Eagle syndrome is a rare condition caused by elongation of the styloid process and/or partial or entire ossification of the stylohyoid ligament. Only a small number of those affected have associated symptoms and the majority is asymptomatic [1,2].

SUBJECT
We report a case of a 38-year-old man with bilateral posterior open bite as well as maxillary and mandibular retrognathia and ongoing left-sided head pain, myalgia and recurrent vertigo. He had been treated with fixed orthodontics alio loco throughout the past two years in the context of a combined orthodontic-orthognathic therapy (Fig. 1).

RESULTS
In this case, Eagle syndrome was an incidental finding. Due to an orthodontic council at our clinic and a hereby taken cone-beam computed tomography (CBCT), an elongation of the left styloid process of 60-62 mm was noticed. In addition to that, arthrosis of the left temporomandibular joint was diagnosed correlated with marked craniofacial dysfunction (Fig. 1). Theoretically, both Eagle syndrome and craniofacial dysfunction could have been the cause of the patient's symptoms. He was referred to a specialized surgeon who found that orthognathic surgery had to be carried out first for this might lead to a relief of the symptoms (Fig. 2, Fig. 3). Afterwards, the symptoms should be re-evaluated with a possibility of the need of a resection of the elongated styloid process.

Fig. 1: Before surgery

Fig. 2: Maxillary and mandibular surgery

Fig. 3: After surgery

CONCLUSION
A consequence of this case report should be the awareness of the possibility to incidentally find the rare condition Eagle syndrome in the course of everyday orthodontics, especially when using CBCT. Yet, the mere presence of an elongated styloid process does not automatically go along with a symptomatic type of the Eagle syndrome.

REFERENCES
2. Song JH, Ahn SK, Cho CB. Elongated Styloid Process as a Cause of Transient Ischemic Attacks. JAMA Neurology 70 (2013) 1072-1073