Eagle Syndrome

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Background

Eagle syndrome is characterized by recurrent pain in the oropharynx and face due to an elongated styloid process or calcified stylohyoid ligament. The styloid process is a slender outgrowth at the base of the temporal bone, immediately posterior to the mastoid apex. It lies caudally, medially, and anteriorly toward the maxillo-vertebro-pharyngeal recess (which contains carotid arteries, internal jugular vein, facial nerve, glossopharyngeal nerve, vagal nerve, and hypoglossal nerve).

With the stylohyoid ligament and the small horn of the hyoid bone, the styloid process forms the stylohyoid apparatus, which arises embryonically from the Reichert cartilage of the second branchial arch. Eagle defined the length of a normal styloid process at 2.5-3.0 cm. The normal length of the styloid process varies greatly, as follows:

- From 1.52-4.77 cm, according to Moffat et al (1977)
- Less than 3 cm, according to Kaufman et al (1970)
- From 2-3 cm, according to Lindeman (1985)
- Less than 2.5 cm, according to Correl et al (1979), Langlais et al (1986), and Montalbetti et al (1995)
- Less than 4 cm, according to Monsour and Young (1986)
- According to Balcioglu (2009), the mean length of the styloid processes of the subjects reporting Eagle syndrome is reported to be 40 +/- 4.72 mm.

An image depicting Eagle syndrome can be seen below.

Radiographs of the vertebral spine: a-p and lateral view. Neither distinct malposition nor major degenerative changes of the cervical spine are recognizable. The ligamenta stylohyoidea on both sides is largely ossified. The patient's medical condition might be ascribed to a kerato-stylohyoidal syndrome.

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