

# Eagle Syndrome

- Author: Vittorio Rinaldi, MD; Chief Editor: Arlen D Meyers, MD, MBA [more...](#)

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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)<sup>[1]</sup>
- Less than 3 cm, according to Kaufman et al (1970)<sup>[2]</sup>
- From 2-3 cm, according to Lindeman (1985)<sup>[3]</sup>
- Less than 2.5 cm, according to Correl et al (1979), Langlais et al (1986), and Montalbetti et al (1995)<sup>[4, 5, 6]</sup>
- Less than 4 cm, according to Monsour and Young (1986)<sup>[7]</sup>
- 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.<sup>[8]</sup>

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.

## Contributor Information and Disclosures

Author

**Vittorio Rinaldi, MD** Specialist in Otolaryngology, Department of the Campus Bio-Medico, University of Rome

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Coauthor(s)

**Fabrizio Salvinnelli, MD** Professor of Otolaryngology, Campus Bio-Medico, University of Rome

Disclosure: Nothing to disclose.

**Manuele Casale, MD** Specialist in Otolaryngology, University Campus Bio-Medico, School of Medicine, Rome, Italy

Disclosure: Nothing to disclose.

**Francesco Faiella, MD** Resident in Otolaryngology, University Campus Bio-Medico, School of Medicine, Rome, Italy

Disclosure: Nothing to disclose.

Specialty Editor Board

**Jack A Coleman, MD** Consulting Staff, Franklin Surgical Associates

Jack A Coleman, MD is a member of the following medical societies: [American Academy of Facial Plastic and Reconstructive Surgery](#), [American Academy of Otolaryngic Allergy](#), [American Academy of Otolaryngology-Head and Neck Surgery](#), [American Academy of Sleep Medicine](#), [American Bronchoesophagological Association](#), [American College of Surgeons](#), [American Laryngological Rhinological and Otological Society](#), [American Society for Laser Medicine and Surgery](#), and [Association of Military Surgeons of the US](#)

Disclosure: accarent, inc Honoraria Speaking and teaching

**Francisco Talavera, PharmD, PhD** Senior Pharmacy Editor, eMedicine

Disclosure: eMedicine Salary Employment

**Robert M Kellman, MD** Professor and Chair, Department of Otolaryngology and Communication Sciences, State University of New York Upstate Medical University

Robert M Kellman, MD is a member of the following medical societies: [American Academy of Facial Plastic and Reconstructive Surgery](#), [American Academy of Otolaryngology-Head and Neck Surgery](#), [American College of Surgeons](#), [American Medical Association](#), [American Neurotology Society](#), [American Rhinologic Society](#), [American Society for Head and Neck Surgery](#), [Medical Society of the State of New York](#), and [Triological Society](#)

Disclosure: GE Healthcare Honoraria Review panel membership

**Christopher L Slack, MD** Otolaryngology-Facial Plastic Surgery, Private Practice, Associated Coastal ENT; Medical Director, Treasure Coast Sleep Disorders

Christopher L Slack, MD is a member of the following medical societies: [Alpha Omega Alpha](#), [American Academy of Facial Plastic and Reconstructive Surgery](#), [American Academy of Otolaryngology-Head and Neck Surgery](#), and [American Medical Association](#)

Disclosure: Nothing to disclose.

Chief Editor

**Arlen D Meyers, MD, MBA** Professor, Department of Otolaryngology-Head and Neck Surgery, University of Colorado School of Medicine

Arlen D Meyers, MD, MBA is a member of the following medical societies: [American Academy of Facial Plastic and Reconstructive Surgery](#), [American Academy of Otolaryngology-Head and Neck Surgery](#), and [American Head and Neck Society](#)

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