

The anterior [superior alveolar nerve](#) (ASAN) is a branch of the infraorbital nerve. Only few studies have morphometrically evaluated the course of the ASAN. Midfacial segments of ten hemisectioned fresh adult cadaver heads were dissected to uncover the anterior wall of the maxilla. Specimens were subsequently decalcified and the bone overlying the ASAN was removed under a microscope to expose the ASAN. Its branching pattern from the infraorbital nerve was recorded, and the course of the ASAN within the anterior wall of the maxillary sinus was morphometrically assessed measuring distances to predefined landmarks using a digital caliper. A distinct ASAN was observed in all specimens. It arose lateral (six cases) or inferior (four cases) from the infraorbital nerve. The point of origin was located at a mean distance of 12.2 ± 5.79 mm posterior to the infraorbital foramen. The ASAN was located on average 2.8 ± 5.13 mm lateral to the infraorbital foramen. After coursing medially, the ASAN ran inferior to the foramen at a mean distance of 5.5 ± 3.07 mm. When approaching the nasal aperture, the loop of the ASAN was on average 13.6 ± 3.07 mm above the nasal floor. The horizontal mean distance from the ASAN to the nasal aperture was 4.3 ± 2.74 mm halfway down from the loop, and 3.3 ± 2.60 mm at the floor of the nose, respectively. In conclusion, the present study evaluated the course of the ASAN relative to the infraorbital foramen and nasal aperture. This information is helpful to avoid damage to this anatomical structure during interventions in the infraorbital region of the maxilla. Further, knowledge of the course of the ASAN and of its bony correlate (canalis sinuosus) may be valuable in interpreting anesthetic or radiologic findings in the anterior maxilla ¹⁾.

Posttraumatic midface pain secondary to injury of the [anterior superior alveolar nerve](#) (ASAN) is characterized as pain localized to the central and lateral incisors, canines, and maxilla. This nerve is susceptible to injury and subsequent formation of neuromas after midface trauma. Surgical intervention requires an accurate and precise understanding of the course of the ASAN ²⁾.

see [Anterior superior alveolar nerve injury](#).

¹⁾

von Arx T, Lozanoff S. Anterior superior alveolar nerve (ASAN). Swiss Dent J. 2015;125(11):1202-9. PubMed PMID: 26631255.

²⁾

Olenczak JB, Hui-Chou HG, Aguila DJ 3rd, Shaeffer CA, Dellon AL, Manson PN. Posttraumatic Midface Pain: Clinical Significance of the Anterior Superior Alveolar Nerve and Canalis Sinuosus. Ann Plast Surg. 2015 Nov;75(5):543-7. doi: 10.1097/SAP.0000000000000335. PubMed PMID: 25710550.

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