Lipomas of the head-neck: a systematic review of literature over the last 10 years

Andrea Pacifici[1]
Giulia Caporro[1]
Luciano Pacifici[1]

[1] Department of Odontostomatological and Maxillofacial Sciences, Sapienza University, Rome, Italy

Corresponding author: Giulia Caporro
e-mail: caporro.1702331@studenti.uniroma1.it

Abstract

***Aim*: A lipoma is the most common benign mesenchymal tumor of soft tissues; however, only 13% of lipoma cases are found in the head and neck region. This systematic literature review aims to analyze case reports to identify an appropriate diagnostic pathway for detecting head and neck lipomas. Methods: Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, a literature search was conducted of the PubMed/Medline, Scopus, and Web of Science databases. 64 studies were included in the final quantitative analysis. Results: Analyzing the selected studies allowed for identifying a correct diagnostic pathway to achieve an accurate lipoma diagnosis. Conclusions: It is appropriate to improve and consolidate knowledge about preliminary instrumental investigations, which, along with histopathological examination, play crucial roles in defining a correct diagnosis of lipoma.**

Keywords: Lipomas, Lipomas of the head and neck.

Introduction

Lipoma is the most common benign tumor of mesenchymal origin in soft tissues, with a prevalence of 2.1 per 1000 people (1). Only 13% of lipoma cases occur in the head and neck region (2).

Although lipomas of the head-neck district are rare in children, they are more frequently found in male individuals, with a peak incidence between the fifth and sixth decade of life (3).

The most common sites of oral lipoma are the cheek and salivary glands, followed by the tongue, the floor of the mouth, the buccal groove, the vestibule, the lip, the palate, and the gum. In the neck, lipomas usually involve the posterior triangle; those of the anterior neck are rare (3,4).

The lipoma is typically a mass with a smooth, soft surface. Symptoms vary depending on the lesion's location, growth rate, and size. Lipomas in the upper aero-digestive system usually remain asymptomatic; however, a gradual increase in size can lead to issues such as unsightedness, dysphagia, dyspnea, dysphonia, OSAS, and compression of nearby structures (7,8).

Differential diagnosis depends on clinical examination and instrumental diagnostics, including ultrasound, CT, MRI, and sometimes cytological analysis with fine needle FNAB/FNAC (Fine Needle Aspiration Biopsy/Cytology) (3,10). Ultrasound is the main imaging method for head and neck lipomas (12,13). However, CT and MRI provide more detailed imaging for confirming the diagnosis (5).

This systematic review was created to examine the scientific evidence on head and neck lipomas, supporting accurate diagnosis and the selection of suitable treatment options to enhance their prognosis.

How to Cite

Andrea Pacifici, Giulia Caporro, Luciano Pacifici.
Lipomas of the head-neck: a systematic review of literature over the last 10 years.
Annali Di Stomatologia, 16(3), 263-292.
https://doi.org/10.59987/ads/2025.3.263-292

Materials and methods

Research Strategies

According to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, studies were systematically selected from PubMed, Scopus, and Web of Science databases.

To review the scientific evidence on head and neck lipomas, a keyword literature search using the term "Lipomas of head and neck" was conducted for all scientific publications published between January 2014 and May 2025.

Eligibility criteria

The exclusion criteria were as follows: articles written in languages other than English, articles not belonging to the case report category (such as clinical trials, systematic reviews, and meta-analyses), and studies conducted on species other than humans. Systematic reviews and meta-analyses were reviewed and referenced.

All studies were downloaded into Excel after duplicates were removed during the initial screening. Two independent reviewers (A.P. and G.C.) performed screening by title and abstract. A third supervising researcher (L.P.) was consulted in case of discrepancies. If the reviewers disagreed, the study was excluded from the systematic review.

The reviewers jointly conducted the second phase of the systematic process, which involved full-text screening and the final inclusion decision.

Data Selection Process and Data Extraction

Data relevant to each article were extracted and compiled into an Excel sheet: (a) first author and year of publication, (b) number of cases, (c) age and sex of patients, (d) site of presentation, (e) clinical features, (f) diagnosis and histopathological features, and (g) treatment and follow-up.

Qualitative assessment: risk of bias of the included studies.

Two authors independently assessed the quality of the included studies using the "JBI Critical Appraisal Tools" [15], providing the same values. The JBI Critical Appraisal Tools for evaluating the quality of quantitative studies consist of an eight-question checklist. For each question on the checklist, one of the following judgments was assigned: Yes/No/Unclear/Not Applicable (Table 1). The risk of bias for each selected individual study was classified as follows: high (H) if the survey achieved a score with 49% "yes" judgments, moderate (M) if the percentage of "yes" judgments was between 50% and 69%, and low (L) when the rate of "yes" judgments was greater than 70%.

Results

Selection of the study

Initially, 1002 articles were identified. Preliminary stock examination excluded 418 articles. The remaining 584 articles were manually analysed to select potential articles for qualitative analysis. Only 64 articles (6-8, 16-75) met the eligibility criteria and were included in the systematic review.

The 64 articles included in the qualitative analysis analysed 74 cases (Figure 1).

Results of the studies

The following table (Table 2) shows the general characteristics of the included studies.

Age and gender distribution of patients

The subjects ranged from 0 to 87 years, with an average age of 50.8 years. The male subjects (n = 51) had a mean age of 51.8 years, and the female subjects (n = 23) a mean age of 48.8 years.

Lesion site

The analysis of 74 cases of lipoma found 48 instances of lipomas of the head and 35 instances of lipomas of the neck (in some subjects, both the tissues of the head and the neck were affected).

In the head region, 12 cases were found at the level of the parotid gland, 1 in the periauricular region, 1 in the infratemporal fossa, 5 in the mandible, 3 in the cheek, 3 in the mucosa genéenne, 3 floor, 3 submaxillary gland, 3 tongue, 6 tongue, 3 hard palate, 3 soft palate, 4 tonsils, and 1 lip. At the neck level, 8 cases were found in the pharynx, 8 in the larynx, 1 in the anterior triangle, and the remaining in the posterior triangle involving the sternocleidomastoid muscle.

Table 1. Checklist of Quality System Tools.

Checklist
1. Were the Patient's Demographic Characteristics Clearly Described? Yes/No/Unlcear/Not Applicable
2. Was the Patient's History Clearly Described and Presented as a Timeline? Yes/No/Unlcear/Not Applicable
3. Was the Current Clinical Condition of the Patient on Presentation Clearly Described? Yes/No/Unlcear/Not Applicable
4. Were Diagnostic Tests or Assessment Methods and the Results Clearly Described? Yes/No/Unlcear/Not Applicable
5. Was the Intervention(s) or Treatment Procedure(s) Clearly Described? Yes/No/Unlcear/Not Applicable
6. Was the PostIntervention Clinical Condition Clearly Described? Yes/No/Unlcear/Not Applicable
7. Were Adverse Events (Harms) or Unanticipated Events Identified and Described? Yes/No/Unlcear/Not Applicable
8. Does the Case Report Provide Takeaway Lessons? Yes/No/Unlcear/Not Applicable

10.59987/ads/2025.3. 263-292

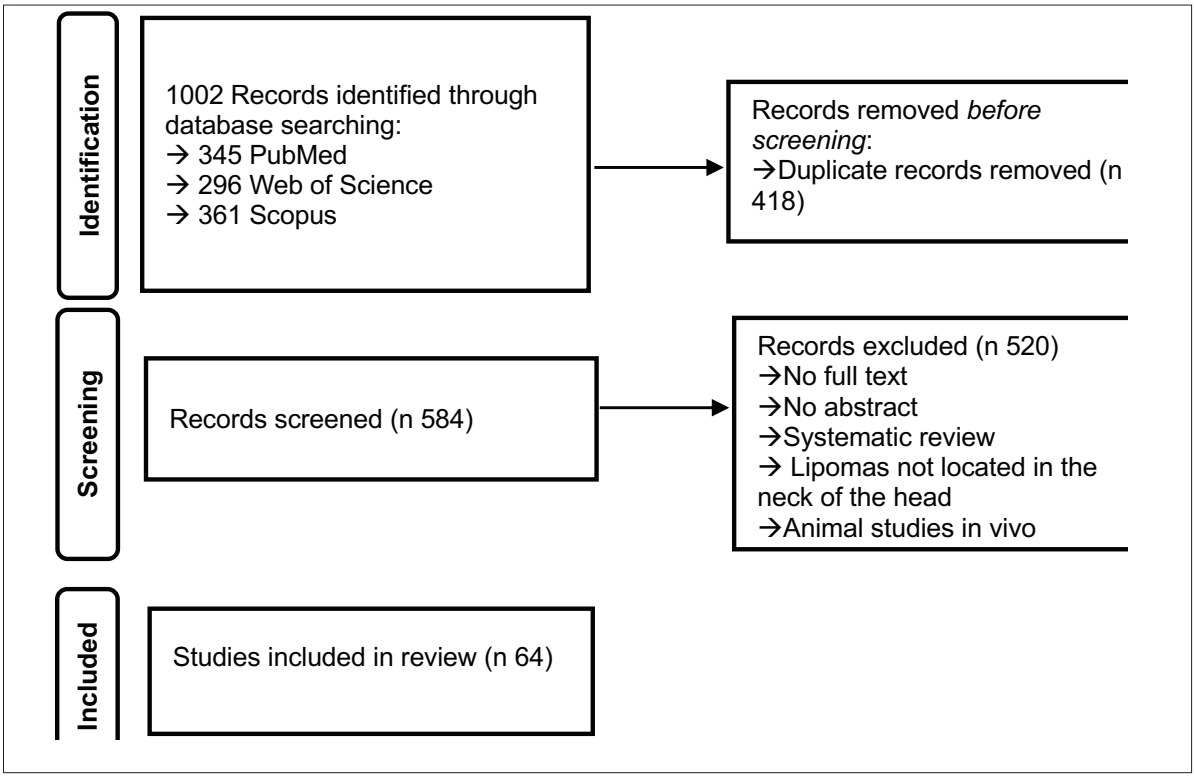

Figure 1. PRISMA flow diagram.

Symptoms
Most subjects reported no symptoms except dysphagia, dyspnea, dysphonia, OSAS, and compression phenomena of surrounding structures.

Clinical presentation
The lipoma appears to be a well-circumscribed mass with a smooth surface, soft consistency, not pulsating, and variable size depending on the growth rate (in our study, one case reached the dimensions of 26 x 18 x 18 cm).

Instrumental investigations
In the cases analyzed, the following instrumental investigations were used: ultrasound (n = 9), CT (n = 41), MR (n = 32), and sometimes FNAC (n = 19).

Histological examination
Histological examination was performed and documented for 61 tissue samples taken.

Treatment options and follow-up
The lipomatous lesion was treated by surgical excision in most cases (n=70), followed by a thorough analysis of post-operative conditions (n=50) and a follow-up period (n=39).
In one case, there were post-operative complications with the onset of Horner's syndrome, vagus nerve neuropathy, and headache due to the removal of a lipoma from the head-neck area of the parafrenum.

Risk of bias
Most of the 64 articles included in the review have a low risk of bias (n=47). Seven are at moderate risk, and 10 are at high risk (Table 3).

Discussion

This review aimed to analyze several cases reported in the literature over the last 10 years to identify a valid diagnostic strategy for head-neck lipomas to facilitate their treatment and improve prognosis.
Soft tissue tumors of the head-neck district are rare and difficult to diagnose for differentiation into benign and malignant lesions. In the 5th edition of the 2020 World Health Organization (WHO) classification of soft tissue and bone cancers, new pathological forms were introduced, based on histological differentiation. Understanding molecular tumor genetics improves diagnostic accuracy for tumors that are difficult to classify based on morphology or have morphological overlaps (77).
Lipoma accounts for almost 50% of all soft tissue tumors (3). Benign lipomatous lesions involving soft tissue are distinguished into lipoma, fibrolipoma, lipoblastoma, angiolipoma, myolipoma of soft tissues, condrolipoma, fusiform cell lipoma, ibernoma, and lipoma pleomorphic (7,77).
The etiology of lipomas is unknown, although several studies confirm that pathogenesis can be linked to hereditary factors, traumas, infections, endocrine pathologies (such as diabetes), corticosteroids, obesity, and radiation (4, 12).
Clinically, lipomas are asymptomatic masses that grow slowly and progressively in size. For this reason, those affected discover the lesion when it already has considerable dimensions. Depending on their location, they may cause dysphagia, dysphonia, breathlessness, a foreign body sensation, or OSA.
Clinically differential diagnoses include mucocele, pleomorphic adenoma, lipoma, and fibroids (23).

Table 2. General characteristics of the included studies

First Authors Name/ Year of Publication [Reference Number]	Number of Cases	Age and sex of Patients	Site of Presentation	Clinical Features	Diagnosis Histopathological Features	Treatment and Follow Up
Madhu Priya/2020 [7]	4	1st - 41-year-old male	Neck (sternocleidomastoid muscle posterior)	Swelling 8 x 9 cm was soft to firm, non tender, slip sign positive and non pulsatile.	MRI of neck revealed a large lipoma on left side of neck underneath left sternocleidomastoid muscle posterior to parotid space in paravertebral space and insinuating into carotid space approximatly 8 x 7,9 x 5.4 cm in size. FNAC of neck swelling showed features of lipoma.	Swelling was completely excised during the biopsy. Postoperative period was uneventful.
		2nd - 74-year-old male	Head (oral cavity → tongue)	Swelling was globular of approximatly 5 x 5 cm size, soft in consistency and located at the tip of tongue. The overlying mucosa contained dilated vessels.	The MRI was carried out. Histopathological examination reports the diagnosis of lipoma.	The mass was dissected out and sent for histopathological examination. Postoperative period was uneventful.
		3rd - 42-year-old male	Head (oral cavity → hard and soft palate extending to the lateral pharyngeal wall)	Swelling was 6 x 4 cm smooth surfaced, firm, non pulsatile mass.	The CT scan revealed a hypodense lesion measuring 6.1 x 4.3 x 3.4 cm in the oral cavity. FNAC was reported as lipoma. The histological examination was diagnostic of a simple lipoma.	The mass was excised by an intraoral approach. A 4 months follow-up did not reveal any recurrence.
		4th - 45-year-old female	Head (oral cavity → tonsillar fossa)	Mass was smooth, pale, yellow and soft to firm in consistency.	The MRI revealed a well-defined hyperintense area measuring approximately 23.3 x 10.8 x 22.6 mm in left tonsillar fossa. The FNAC of mass was reported as tonsillar lipoma. The histological examination was diagnostic of a simple lipoma.	The mass was excised by trans oral robotic surgery. Postoperative period was uneventful. A 6 months follow-up did not reveal any recurrence.

To be continued

Y. Najaf/2019 [8]	3	1st - 80-year-old male	Neck (pharyngo-laryngeal supraglottic wall)	Moderate bulging through the aryepiglottic fold.	An injected CT scan revealed a mass located on the pharyngo-laryngeal supraglottic wall. Histopathological examination reveals diagnosis of lipoma.	An endoscopic Co2 laser resection was done and a mass was extruded. Postoperative period was uneventful. Annual follow-up did not reveal any recurrence.
		2nd - 49-year-old male	Neck	Cervical mass was soft in nature, non tender and extending beyond sternal notch.	MRI imaging suggested a lipoma nature of this mass measuring approximately 10 cm and situated between the left common carotid artery, the internal jugular vein and the vagus nerve.	The mass has been completely excised. No neuro-vascular injury was encountered preoperatively nor postoperatively.
		3rd - 64-year-old male	Neck	The mass was smooth in consistency, non tender and deeply seated.	A cervical CT scan showed a lipoma measuring approximately 13 × 8 cm with suspicion of liposarcoma. Histopathological examination reveals diagnosis of lipoma, weighing around 450 g.	The mass has been completely removed Patient developed a hypertrophic scar treated with intra-lesional cortisone injection with overall good results.
Justyna Tyra/2023 [16]	1	10-month-old female	Head (oral cavity → palatine tonsil and tongue)	Asymptomatic soft-tissue mass in the lateral face area. Intraoral examination showed a asymmetry of the pharynx with a medial displacement of the left palatine tonsil and tongue.	MRI revealed a circumscribed, irregular mass. It spread out to the wall of the orbit. The mass was adherent to the nasal cavity and to the lateral wall of the left maxillary sinus. CT confirmed a mass in the left preauricular area, in the infratemporal fossa, and in the masseteric space.	The mass has been completely removed. Postoperative period was uneventful. A 2 months follow-up did not reveal any recurrence.
P. Lomoro/2020/ [17]	1	7-month-old male	Neck and head	Asymptomatic latero-cervical mass.	A CT scan revealed a large, grossly oval encapsulated right neck mass. For a better investigation of the mass an MRI study with anaesthesia assistance was performed.	The mass has been completely excised.
Vadim Reiser/2020 [18]	1	51-year-old female	Head (the inferior border of the right mandibular area) and neck	Clinical examination revealed circumscribed, firm and mobile mass, of 4 cm diameter, located in the postero-lateral aspect of the right neck.	US examination revealed a solid hypo-echogenic subcutaneous mass located in the right mandibular angle, 0.93 x 2.52 cm in size. FNAC exposed blood cells but did not yield diagnostic material or a definitive diagnosis. CT scanning revealed a 4 cm diameter, well-demarcated, middle-intensity (between liquid and soft tissue) homogeneous mass adjacent to the parotid gland and the posterior edge of masseter muscle. Microscopically, the tumor was composed of convolutes thin-walled blood vessels, with clusters of mature adipocytes, and a prominent perivascular arrangement of the adipose tissue.	The mass was excised, performing a sub-platysma dissection and maleaging excessive bleeding during the surgery. Post-operative recovery was fair. A 5 months follow-up did not reveal any recurrence.

To be continued

Bo Li/2024 [19]	1	58-year-old male	Neck (laryngopharyngeal)	The extraoral mass was about 15 × 6 × 4 cm in size, soft, and showed no tenderness.	CT scan of the mass revealed that the oropharynx and upper pharyngeal respiratory tract harbored dense soft tissues extending into the oral cavity, while the normal structure of the left pyriform fossa was no longer visible. Pathological findings were consistent with lipoma.	The mass was complete excised. A 8 years follow-up did not reveal any recurrence.
Gholamreza Motazedian/2021 [20]	1	10-year old male	Head (periauricular region)	Periauricular painless subcutaneous mass.	The MRI revealed ill-defined soft tissue mass in the left periauricular region. Histopathological examination reveals angiolipoma diagnosis.	The lesion was completely excised during the biopsy. After surgery, the patient developed transient left frontal branch palsy, but recovery was excellent and after one year there is now no relapse. A 1 year follow-up did not reveal any recurrence.
Shivcharan L Chandravansh/2014 [21]	1	3 days old, female	Head (Encephalocraniocutaneous lipomatosis)	Dermatological examination showed soft, nodular mass at right lateral canthus; multiple patches of alopecia, 'nevus psiloliparus,' 'S'-shaped hypoplastic skin lesion extending from mid-forehead to root of the nose, multiple punched out lesions on the occipital region of the scalp, and a lipoma in the fronto-temporal region	CT scan of the brain and orbit revealed focal calcification of globe, fatty infiltration in anterior orbit, intracerebral cyst compressing right ventricle, intracerebral calcification, and lipoma near right cerebello-pontine angle and in right cerebrum. These clinical and imaging findings led to a defi nitive diagnosis of encephalocraniocutaneous lipomatosis.	-

To be continued

Sergio Santoso/2023 [4]	1	44-year-old female	Head (parotid gland)	Solitary mass on the left preauricular region, with a size within 4 x 3 x 2 cm, firm in consistency, and not compressible on palpation. The skin over the swelling appeared normal.	FNAC, US and MRI were performed sequentially to establish a preoperative diagnosis. Histopathological examination showed homogeneous mature adipocytes (round-oval nuclei), fine chromatin, and broad cytoplasm.	A surgical lipoma excision, facial nerve dissection, and superficial parotidectomy were performed. Postoperative period was uneventful. A 1 and 2 years follow-up did not reveal any recurrence.
Kamal Nain Rattan/2022 [22]	1	3-year-old male	Neck	A 5 cm x 3 cm lump was noted in the right posterior triangle of the neck which was nontender, firm in consistency, and slight mobile in lateral directions with normal overlying skin.	US of the swelling revealed echogenic lesion in right side of neck at the site of swelling showing no flow on color Doppler, suggestive of fibrolipoma/lipoma. A provisional diagnosis of lipoma was suggested on CT-Scan. Histopathological examination showed a mixture of the mature adipocytes and spindle cells with a few cystic spaces. The findings were consistent with benign adipose tissue tumour-fibrolipoma.	The mass was excised under general anaesthesia. Postoperative period was uneventful.
Sunila Jain/2022 [23]	1	85 years old female	Head (oral cavity →oropharynx, tonsillar fossa and soft palate)	The mass was soft, cystic, globular and forming a pedunculated mass.	MRI of neck with contrast showed a large, well circumscribed elongated intra-oral soft tissue mass lesion arising from right pharyngeal mucosal space and right posterior soft palate with partial compression of oropharyngeal airway. There was no invasion of adjacent structures. Microscopic examination showed a lesion composed of lobules of mature adipose tissue. The overlying squamous mucosa showed mild hyperplasia. The features were consistent with lipoma.	The patient underwent complete surgical excision of the mass under general anesthesia. A 2 months follow-up did not reveal any recurrence.

To be continued

Deniz Demir/2022 [24]	2	1st - 34-year-old male	Neck (larynx → vocal fold)	The mass was smooth, submucosal, rounded arising from the left false vocal fold.	CT scan showed a mass with regular,well-defined margins located on the left falsevocal fold. MRI was not obtained due to the cardiovascular implanted electronic device of the patient. Microscopic examination showed a circumscribed mass with organoid-seromucous glands surrounded by numerous mature adipocytes, separated from the parenchyma and fatty tissue by fibrous tissue.	The mass was excised endoscopically with a radiofrequency laryngeal probe. A 1 year follow-up did not reveal any recurrence.
		2nd - 54-year-old male	Neck (in the area of the thyroid gland)	The mass was soft, non-tender, non-pulsatile massive swelling on the left side of the sternocleidomastoid muscle.	CT showed a well-defined, fat density mass with septations inside the left SCM muscle. A MRI reported a 3x2x7 cm, predominantly fatty tissue mass located within the SCM muscle. Histopathological examination showed uniformly rounded cells with peripheral sheets of mature adipocytes containing large clear cytoplasm and eccentric nuclei with conspicuous vascularity and no evidence of cellular atypia. Based on the histopathological features, the diagnosis of lipoma was made.	The patient underwent resection of the mass under general anesthesia. A 5 months follow-up did not reveal any recurrence.
Ivanka Temelkova/2018 [25]	1	74 -year-old female	Neck	Subcutaneous painless mass formation of the ventral neck.	Ultrasound of the thyroid gland revealed a hypoechoic formation with streakiness and rounded adenomatous sections covering the right thyroid. Radiography of the neck area showed moderately arcuate displaced trachea to the left at the C4-C7 level. FNAB confirmed a benign lipoma. An MRI study was conducted which identified the presence of a large, subcutaneously located lesion of irregular shape and homogeneous structure, with a well-formed capsule.	-

To be continued

Muhammad Sami Jabbr/2017 [26]	1	58-year-old Male	Larynx (right pyriform sinus)	Large mass covered by smooth looks like normal mucosa, occupying the right supraglottic area obscuring glottic gap visualisation and causing narrowing of both the hypopharynx and larynx.	Imaging studies by CT scan and MRI confirmed the diagnostic hypothesis of lipoma. Histopathological examination showed mature adipose tissue consistent with a lipoma.	The mass was completely excised. Postoperative period was uneventful.
Ahmed A. Zahrani/2021 [27]	1	47-year-old Male	Head (oral cavity → floor of the mouth and tounge)	Oral examination revealed the presence of a circumscribed, soft mass located on the left side of the oral cavity that was beside the tongue. The overlying mucosa was intact and appeared normal.	Imaging studies by CT scan and MRI showed an irregular mass in the area of the genioglossus muscle extending from the base of the tongue to the skin overlying the mylohyoid muscle with a density similar to the adjacent subcutaneous fat. Histological examination showed an encapsulated lobulated tumor comprising mostly mature adipocytes.	The mass was excised through an intraoral approach. Postoperative period was uneventful. A 5 years follow-up did not reveal any recurrence.
Beena R Varma/2020 [6]	1	56-year-old female	Head (oral cavity → tongue)	On intraoral soft tissue examination, a growth was noted on the dorsal surface of the tongue at the junction of anterior two-third and posterior one-third, midway between the midline of the tongue and left lateral border without any pain or pus discharge.	A final diagnosis of lipoma on the dorsal surface of the tongue was given after the histopathological examination.	Excisional biopsy of the growth on the dorsal surface of the tongue was done. Postoperative period was uneventful.
Vural Akin/2022 [28]	1	87-year-old male	Head (oral cavity → buccal mucosa)	On the left buccal mucosa, a mass of approximately 5x5 cm, with a pedicle of approximately 1 cm in diameter, with regular mucosa, soft consistency, pink-yellow color was observed just lateral to the maxillary first and second premolar teeth.	The mass was evaluated by MRI which clearly demonstrated the lipomatous nature of the lesion.	The mass was completely excised. Postoperative period was uneventful. A 6 months follow-up did not reveal any recurrence.

To be continued

Kimberly N. Tong/2019 [29]	1	46-year-old female	Head (parotid gland)	The mass was soft and mobile arising from the region of the right parotid gland.	MRI revealed a lesion with characteristics most consistent with a non-aggressive adipocytic tumor such as a lipoma. Microscopic examination revealed a well-circumscribed aggregate of mature adipocytes that formed a large, well-demarcated mass composed of relatively equal sized adipocytes surrounded by a thin fbrous capsule of dense hyalinized fbrous connective and a rim of unremarkable serous salivary gland tissue.	Treatment included a superficial parotidectomy.
Jawaher Alrumayh/2024 [30]	1	46-year-old male	Neck	The mass was soft, not floating 3 x 3 cm and located in the posterior triangle under the trapezius muscle.	CT scan showed a right posterior neck lipoma between the trapezius and splenius capitis muscles.	The mass was completely excised. Postoperative period was uneventful.
Yong Won Lee/2021 [31]	1	65-year-old male	Head (oral cavity → submandibular gland)	The lesion was soft and nontender on the medial side of the right submandibular gland.	CT scan revealed a 2 x 1.8 x 2.7 cm low-density lesion in the right submandibular gland. The lesion was diagnosed as an ordinary lipoma on histopathological examination, which was well-capsulated and was composed of mature adipose cells.	Submandibular resection was performed using the transcervical approach under general anesthesia. Postoperative period was uneventful. The patient was followed up for 3 years, without any recurrence.
Joyson Kodiyan, B.S/2014 [32]	2	1st - 58-year-old male	Neck (larynx)	Large submucosal mass involving the left supraglottic larynx, specifically the left aryepiglottic fold, interarytenoid area, and left arytenoid.	CT scan showed a 1.3 × 3.5 × 3.1 cm, predominantly fat-density mass located in the larynx eccentric to the left, extending to the epiglottis and left vocal cord, causing mass effect and compromise of the airway, with reduction of the airway lumen.	A transoral robotic surgical procedure was used to completely remove the tumor from the supraglottic larynx and provide a stable airway. Postoperative period was uneventful.
		2nd - 79 year-old womale	Neck (larynx)	A large submucosal mass in the right supraglottis, extending from the arytenoid into the aryepiglottic fold.	CT imaging revealed a hypodense lesion consistent with lipoma that was 1.8 cm in largest diameter. Pathology was consistent with a benign spindle cell lipoma, with FISH testing negative for MDM2, which allows discrimination of lipoma from well-differentiated liposarcoma.	A laser was used to create an epithelial incision over the tumor, allowing the fatty contents to be exposed.

To be continued

Pooja Pal/2014 [33]	1	40 year-old female	Neck (parapharyngeal space)	A 7 x 5 cm smooth, soft, spherical bulge was noted over the right lateral wall of the oropharynx, displacing the tonsil medially and reaching the nasopharynx superiorly.	Indirect laryngoscopy showed the lesion reaching up to vallecula. The CT scan revealed a well-defined homogenous mass with low fat attenuation density and few thin septae within the lesion. Histopathological evaluation showed mature adipocytes interspersed with fibrous tissue, confirming the diagnosis of lipoma	The patient underwent total excision of the lesion by a transcervical approach under general anesthesia. Post-operatively, the patient exhibited slight deviation of the angle of the mouth to the opposite side and tongue to the same side, presumably due to traction applied on the marginal mandibular and hypoglossal nerves during dissection. This however improved over time, and 9 months postoperatively the patient remains symptom-free with complete recovery of neuromuscular function.
M. Loudghiri/2023 [34]	1	44-year-old male	Head and Neck (parapharyngeal space)	The oropharyngeal mass pushed back the soft palate and uvula.	At nasofibroscopy was seen a mass of the cavum reaching the level of the choanae; the epiglottis was deviated backwards and the vocal cords were mobile. CT showed a process in the retropharyngeal region, causing a mass effect on the soft palate and extending to the nasopharynx. MRI showed an expansive process which is effaced on fat saturation sequences.	The patient was operated using a combined cervical and endobuccal surgical approach, after being placed in dorsal decubitus with his head in hyperextension.
Gamze Öztürk/2018 [35]	1	17-year-old male	Head (oral cavity → palatine tonsils)	A pedunculated mass with a smooth surface, approximately 3 × 1 cm in size, arising from the upper pole of the right tonsil and extending toward the midline.	MRI of the neck revealed a well-circumscribed nodular lesion, approximately 1 cm in diameter with a moderate enhancement on the anteromedial wall, and fat intensity in all sequences in post contrast series in the right palatine tonsil. Histopathologic examination revealed a lobular encapsulated tumor with an appearance of mature fat tissue, separated by a fibrous septa under the stratified squamous epithelium.	The mass was excised by dissection under sedoanalgesia. Postoperative period was uneventful. One year follow-up of the patient revealed no evidence of any recurrence

To be continued

Sunil Sam Varghese/2023 [36]	1	53-year-old male	Head and Neck (retropharyngeal space)	A smooth mass in the oropharynx extending inferiorly from the level of the base of tongue and superiorly beyond the soft palate causing near complete obstruction of the oropharyngeal airway.	CT of the neck was done which was suggestive of a well-defined, non-enhancing fat density lesion in the retropharyngeal space measuring 8.2 cm craniocaudally, 4 cm anteroposteriorly and 6.2 cm transversely causing marked narrowing of the airway. Histopathological examination revealed a lipomatous hamartoma.	A transoral core biopsy of the lesion was done in the same sitting which was reported as a lipoma.
Yusei Katsuyama/2018 [37]	1	39-year-old male	Neck	Hard and mobile mass was collocated in the left neck, measuring approximately 10 × 10 cm.	Plain X-ray radiographs showed a soft tissue mass with no calcification in the left neck. MRI showed a well-defined and lobulated mass. A needle biopsy was performed, and evaluation of the results resulted in a diagnosis of well-differentiated liposarcoma. Histologically, the tumor was composed of myxoid and cartilaginous matrix, and mature fat cells and lipoblast-like cells were present.	The mass was resected marginally because it was considered a low grade tumor. Postoperative period was uneventful. There was no recurrence at 1 year after surgery.
Ming Hui Wan/2020 [38]	1	6 hours of life female	Head (oral cavity → tongue)	Lobular mass was noted at the base of the tongue.	Histopathologic examination showed polypoid tissue lined by non-keratinising stratified squamous epithelium with sheets of adipocytes seen in lobular architecture separated by fibrovascular septa. The adipocytes display a spectrum of maturation composing of varying sizes of multivacuolated and small signet ring lipoblasts to mature adipocytes, leading to a diagnosis of a congenital tongue base lipoblastoma.	The mass was excised in toto via bipolar diathermy. Postoperative period was uneventful. A 3 months follow-up did not reveal any recurrence.

To be continued

Ioannis Tilaveridis/2018 [39]	2	1st - 81-year-old male	Neck (parotid gland)	The intraparotid mass was mobile, soft, non tender.	The CT of the face and neck confirmed features of lipoma. Histological sections showed lobules of adipose tissue separated by a thin core of connective tissue stroma.	A superficial parotidectomy was performed under general anesthesia using a classic Blair's incision. Postoperative period was uneventful. A 2 years follow-up did not reveal any recurrence.
		2nd - 59-year-old female	Neck (parotid gland)	The right parotid has a mass of about 2 cm in diameter with a smooth surface	MRI showed a well-defined lesion in the superficial lobe of the right parotid gland. Histological examination confirmed the diagnosis of lipoma.	A superficial parotidectomy was performed under general anesthesia using a classic Blair's incision. Postoperative period was uneventful. No recurrence was seen 15 months after surgery.
Matthew G. Crowson/2015 [40]	2	1st - 83 year-old male	Head and Neck (parapharyngeal space)	The mass was located in the wall left parapharyngeal and neck fullness.	The CT demonstrated a lobulated, fat density appearing lesion with scattered thin septations involving the left prestyloid parapharyngeal and paravertebral space with bony scalloping of the left aspect of the C1 cervical vertebra.	The patient was recommended neurosurgical assessment for C1 cervical vertebrae with bone erosion, with a plan to follow the patient with MRI at one-year intervals.
		2nd - 55-year-old male	Head and Neck (parapharyngeal space)	Superiorly, the lesion infiltrated the left parapharyngeal and retropharyngeal spaces at the level of the nasopharynx, extended inferiorly to the level of the hypopharynx, and to the posterolateral larynx.	Consensus on the final pathology arrived at the diagnosis of lipoma	This lesion was first biopsied transorally, and later resected via a transcervical approach. The patient had a complicated postoperative course, including development of Horner's syndrome, first-bite syndrome, left cranial nerve ten neuropathy, and chronic left-sided headache requiring multiple analgesics. Over the past 6 years, the residual lipoma has remained quiescent and with no appreciable change in size.
Fulya Özer/2017 [41]	1	2 years-old male	Neck	A mobile and palpable hard mass was located in the 1/3 bottom part of the sternocleidomastoid muscle on the right side of the patient's neck.		Excision under sedoanalgesia was planned. No recurrence was observed in the post-operative 15-month follow-up.

To be continued

Christopher L. Kalmar/2020 [42]	1	58-year-old female	Head (oral cavity → floor of mouth)	The mass was an approximately 4 × 4 cm soft, mobile, nontender, non fluctuant, lobulated floor of mouth. The oral tongue was noted to be retropulsed and slightly deviated to the right secondary to mass effect. Tongue mobility was found to be intact.	MRI of the face with and without contrast demonstrated diagnosis of lipoma.	Given the size of the mass and patient's symptomatology, the decision was made to offer transoral surgical resection under general anesthesia via nasotracheal intubation.
Nandesh Shetty/2015 [43]	1	21-year-old male	Head (oral cavity → submandibular area)	The swelling measured about 6 cm × 4 cm. Margins of the swelling were diffused, extending up to 1 cm superior to the ear lobe, 3 cm inferior to the inferior border of the mandible, anteriorly up to the level of the body of the mandibular and posteriorly to the mastoid region.	CT scan of the parotid region with intravenous contrast showed a hypodense fat-attenuated lesion with linear strands measuring 52 mm × 37 mm in the retro-mandibular region deep to the sternocleidomastoid muscle, inferior to the parotid gland extending to the submandibular region. The biopsy report revealed lobular growth of large mature fat cells with clear cytoplasm and thin strands of connective tissue, scanty inflammatory cells and few blood vessels.	The lesion was excised under general anesthesia. Postoperative period was uneventful. A 2 years follow-up did not reveal any recurrence.
Jad Hosri/2024 [44]	3	1st - 50-year-old male	Neck	The mass was soft, non-tender to palpation.	CT scan showed a well-circumscribed non-enhancing fat-attenuating mass in the left side of the neck, suggestive of an intramuscular lipoma. The FNA has been executed. Histologic findings showed mature fat cells within muscle tissues. Cellular dysplasia, mitosis, necrosis, or excessive proliferation of blood vessels were not observed.	The lesion was excised under general anesthesia, an incision was extended from the mastoid tip along the neck creases. Postoperative period was uneventful. A 6 months follow-up did not reveal any recurrence.
		2nd - 74-year-old male	Neck	A 10 cm mass was identified in the posterior triangle of the neck.	CT scan was ordered, which showed an 11×7×7 cm^3 mass within the SCM muscle. MRI revealed that the lesion is an intramuscular lipoma extending between neck level VB and the supraclavicular region, anteriorly limited by the SCM muscle. FNA confirmed that the tumor is consistent with benign adipose tissue as seen in lipoma. A specimen was sent for histological examination which revealed mature adipose tissue consistent with lipoma.	Under general anesthesia, the mass was excised. At 6-month follow-up visit, no recurrence of the mass was observed.

To be continued

		3rd - 38-year-old male	Neck	A 2×2 cm^2 mass at the anterior upper third of the left SCM muscle.	MRI showed a well-circumscribed small lipoma (4×2 cm2), within the muscle planes and lacking solid or nodular components. Only one faintly enhancing septum was detected with no high-grade features. FNA confirmed a low-grade lipomatous tumor diagnosis.	The decision was made to conservatively manage the tumor with monitoring and close follow-up. Serial follow-up visits at 3 and 6 months showed stable size of the mass with no interval changes.
Kannan Ranganathan/2017 [45]	1	24-year-old female	Head (oral cavity → right cheek)	A slowly growing painless swelling of right cheek.	Based on the clinical, histopathological and immunohistochemical findings, a diagnosis of fat free pleomorphic lipoma was given.	The lesion has been completely excised under general anaesthesia through an intraoral approach. The patient was recalled three and six months later for a re-evaluation, and patient was found to be disease free.
Paolo Gennaro/2021 [46]	1	79-year-old male	Head (infratemporal fossa)	A mass palpable soft mobile swelling of the left temporal area was visible.	MRI revealed the presence of a single and homogeneous lipomatous tumour sized 6 × 4cm in the left temporal fossa extending between the outer side of the zygomatic arch and the pterygoid muscle. Histopathological response confirmed the clinico-radiological diagnosis of intramuscular lipoma.	Surgical removal of the tumor by transzygomatic hemicoronal approach has been planned. Postoperative period was uneventful. At 6-month follow-up visit, no recurrence of the mass was observed.
Jagdeep Singh Virk/2016 [47]	1	63-year-old male	Neck (posterior neck)	The swelling was large, smooth, approximately 26×18×18 cm extending left posterior triangle, with no overlying skin changes.	MRI elucidated a large neck mass involving the deep cervical fascia of the entire left posterior triangle with marked mass effect of both the sternocleidomastoid and trapezius muscles. Histology of the mass confirmed a benign spindle-cell lipoma with no malignant features. Spindle-cell lipomas.	The patient underwent left neck dissection and excision of the mass. Postoperative period was uneventful.
Hitoshi Sato/2022 [48]	1	48-year-old male	Neck	Examination showed an elastic soft tumor on the right side of the neck along the cervical nerve from the hyoid bone to the level of the clavicle.	CT showed a tumor on the right neck, with low radiodensity, equivalent to that of adipose tissue. MRI showed a well-defined right neck tumor FNAC was done.	The lesion was completely excised.

To be continued

Saibaba Mahalaksh-mi/2016 [49]	2	1st - 50-year old male	Head (mandibular body and mental protubence)	On clinical examination, a well-circumscribed, solitary, oval swelling was seen on the right mandibular body region, extending from the right corner of the mouth to the inferior border of the mandible away from the mental protrubence to the midportion of the body of the mandible roughly. The skin over the swelling was stretched and shiny; the center of the swelling showed brownish black post-inflammatory pigmentation. On palpation, the swelling was nontender, smooth and soft in consistency.	Complete hemogram and ESR were within the normal limits.	The excision was done under local anesthesia. The excised tissue was a yellowish white oval mass.
		2nd - 38-year-old male	Head (ala of the nose, vermilion border of the lip and upper lip)	On examination, a well cumscribed, dome shaped solitary oval swelling was seen on the left side of the upper lip, extending supero-inferiorly from the ala of the nose to the vermilion border of the lip. Anteroposteriorly extending 1cm away from the philtrum of lip to the corner of the mouth roughly.	Complete hemogram and ESR were within the normal limits.	The excision was done under local anesthesia. The excised tissue was a yellowish white oval mass.
Ben-Zion Joshua/2018 [50]	1	42-year-old female	Head (oral cavity → floor of the mouth and tongue)	A soft tissue mass, covered bythe normal-appearing mucosa, with no ulceration on the right sublingual area.	MRI showed a mass that involved the right floor of the mouth andtongue including the genioglossus, the hyoglossus, themylohyoid, and the intrinsic muscles of the tongue. Microscopic examination revealed mature adipose tissue with striated muscle fibers interspersed within.	Under general anesthesia, via an incision in the rightfloor of the mouth, the tumor was removed, together witha thin margin of normal muscle tissue, in the inferior aspectand some normal oral mucosa in the superior aspect. The postoperative course was uneventful. At 2 years follow-up visit, no recurrence of the mass was observed.

To be continued

10.59987/ads/2025.3. 263-292

Satvinder Singh Bakshi/2015 [51]	1	42-year-old male	Head (oral cavity → palate)	On examination there was a firm, non pulsatile mass on the right side of the hard and soft palate extending to the lateral pharyngeal wall.	CT scan revealed a well-defined hypodense lesion in the oral cavity. The FNAC of the mass was reported as lipoma.	The of the mass was excised. The postoperative period was uneventful with no residual masticatory or speech disturbances. At 4 months follow-up visit, no recurrence of the mass was observed.
Adrián Santana Ramírez/2022 [52]	1	11-year-old female	Head (subtemporal region, zygomatic, and pterygomaxillary fossa)	The progressive increase in volume in the cheek region on the right side.	MRI showed a considerable extension of the lesion is observed, from the zygomatic fossa to the pterygomaxillary, with displacement of the masseter muscle.	It was decided to perform two surgeries with the approach through the same scar from the previous procedures. The first procedure involved a supra-zygomatic incision where a biopsy was taken for ablation of the supra-zygomatic portion of the lesion was realized. The second intervention was performed with a transoral approach, achieving ablation of the zygomatic and pterygomaxillary fossa regions of the lesion.
Klaudiusz Luczak/2015 [53]	1	75-year-old male	Neck (para- and retropharyngeal space)	Slow growing mass of para- and retropharyngeal space.	CT scans revealed a smoothly marginated fat density mass localized forward and laterally from the right long neck muscle. The pathological examination revealed lipoma in the tumor, and lipomatosis in the submandibular gland.	The mass was excised under general anesthesia. The submandibular gland was also removed due to tumor invasion. On the 14th month the clinical follow-up revealed no signs of the disease.
Francesco Paparo/2017 [54]	1	66-year-old female	Head (parotid gland)	Clinical examination showed a soft, non tender, mobile mass which is deep into the superficial skin surface lump measuring 6 cm × 4 cm in size. The swelling was located over the region of the left parotid gland.	The MRI of the parotid region showed a well-defined mass with adipose tissue signal arising from the left deep lobe of the parotid gland extending through the superficial tissues. FNAC was not performed due to the enough amount of information provided by MRI.	A parotidectomy was effected and the tumor was then totally enucleated. Postoperative recovery was uneventful. At 2 years follow-up visit, no recurrence of the mass was observed.
Yunxia Ma/2020 [55]	1	70-year-old male	Neck (larynx)	A large, round, smooth mass on the posterior wall of the subglottic region. Approximately 75% to 80% of the subglottic area was obstructed.	CT, MRI and pulmonary function testing were done. Both CT and MRI suggested that the mass was a lipoma.	The patient underwent tracheotomy and endoscopic excision of the lipoma under general anesthesia. No postoperative complications occurred.

To be continued

Chitrawati B. Gargade/2015 [56]	1	65 years-old female	Head (oral cavity → hard palate)	A well-defined solitary growth was observed on hard palate. The growth was sessile, non tender, non fluctuant and rubbery in consistency.	Microscopic examination showed mature adipose tissue separated by thin fibrovascular septae. Microscopy examination confirmed the provisional diagnosis of lipoma.	The lesion was excised under local anesthesia and submitted for histopathological examination.
Peter George Deutsch/2016 [57]	1	62-year-old male	Neck (larynx)	A large polypoidal lesion arising from the left aryepiglottic fold and prolapsing into the larynx, partially obstructing the airway.	CT scan showed no significant compression from the thyroid goitre, however, it did reveal a well-defined spherical low attenuating lesion in the left posterior laryngopharynx. The ultrasound showed a diffuse goitre with multiple small cysts. The FNAC was done. Histology revealed a fleshy yellow lesion covered by a slightly keratinised stratified squamous mucosa.	The lesion has been completely removed. Postoperative period was uneventful. A 2 months and again 6 months follow-up did not reveal any recurrence.
Giap Hean Goh/2020 [58]	1	79 - year -old male	Neck (parotid gland)	On clinical examination, a 2.5 cm soft, well-delineated mass in the parotid region was noted.	A FNA cytology biopsy was done.	The lesion was excised.
Afshin Teymoortash/2016 [59]	1	34-year-old womale	Head (parotid gland and vestibular sulcus)	Swelling of the right cheek. On clinical examination the oral mucosa was moistened by saliva. Bilateral hemifacial contour was normal, and there were no depressions in either preauricular region. Physical examination of the head and neck was without pathological findings, except for the absence of the left parotid gland papilla.	Ultrasonographic examination of the head and neck area showed that the parotid gland on the left side was totally absent. Ultrasonographic examination of the head and neck area showed that the parotid gland on the left side was totally absent. Histological examination of the specimen confirmed the clinical suspicion of lipoma	The buccal tumor was removed via parotidectomy incision and exposition of the facial nerve. The postoperative recovery proceeded without complications. There was no further follow-up after wound healing was accomplished.
Mohamed S. Rashwan/2023 [60]	1	59-year-old male	Neck (anterior triangle neck)	Neck examination showed right-sided neck swelling extending from the level of the angle of the maledible superiorly to the clavicle inferiorly. Oropharyngeal examination showed right-sided pushing at the oropharyngeal level which seemed to extend from the right parapharyngeal space to involve the retropharyngeal space with evident anterior displacement of the posterior pharyngeal wall.	MRI with contrast was done showing a hyperintense mass in T1 and T2.	Excisional biopsy and histopathology revealed a 13 × 7.5 × 3.5 cm neck lipoma.

To be continued

Liyana Ghazali/2022 [61]	1	49-year-old male	Neck (sternocleidomastoid)	On examination, there was a huge well-circumscribed right neck mass measuring 12 × 10 cm that extended from the angle of maledible to the right supraclavicular area. The mass was soft in consistency, non-tender, with no skin changes or trans-illumination.	Laryngoscopy was unremarkable. FNAC showed mainly a group of mature adipocytes and fibrous stroma, which was consistent with lipoma. CT of the neck was done and revealed a well-defined septated lesion with a fat component in the right sternocleidomastoid muscle. Histopathological examination revealed a well-circumscribed mass composed of lobules of mature univacuolated adipocytes separated by thin fibro-vascular septa.	The patient underwent completely excision of the right neck lipoma under general anaesthesia. At one-year postoperative follow-up, there was no evidence of recurrence.
Ida Barca/2019 [62]	1	53-year-old male	Head (oral cavity)	A swelling on his left cheek, involving the left TMJ. The overlying skin and oral mucosa were normal in color and texture and there was no bruit or pulsation over the mass. The swelling extended from the posterior borderof maledibular ramus toward the anterior border with intraoral extension.	CT examination revealed a well-circumscribed mass with adipose tissue signal density measuring 42 × 27 mm in the left masticator space, without calcification inside and signs of bone erosion. MRI showed a mass of 44 mm × 29 mm with homogeneous high signal intensity on axial T1-weighted and low intensity on T2-weighted images. Histological examination of formalin fixed and paraffin embedder tissue revealed a lesion composed of mature adipose tissue, in absence of nuclear atypia or mitotic activity. Intermingled to the adipous cells were present striated muscle cells, and focally the tumour was peripherally delimited by striated muscle cells. A peripheral capsule was not evident. The diagnosis was of intramuscular lipoma.	The mass was completely excised with resection of part of the masseter and lateral pterygoid muscles, preserving the parotid gland with facial nerve. Postoperative period was uneventful. There was no evidence of recurrence 1 year post-operatively.
Drissia Benfadil/2023 [63]	1	43-year-old male	Head (parotid gland)	Cervical examination reveals a large right laterocervical mass affecting the right parotid region and extending downwards to the supraclavicular fossa, soft, and without inflammatory signs. The oropharyngeal and nasofbroscopic examination does not reveal any oropharyngeal expression of the mass.	An ultrasound was done revealing a lipoma. The cervico-facial CT showed a large right cervical lipoma extending to the parotid compartment.	The patient underwent surgical treatment to removal of the lipoma via cervical incision with a large right preauricular and laterocervical incision. The operative act was without complications, and the postoperative period was uncomplicated.

To be continued

Shreyas N Shah/2022 [64]	1	42-year-old female	Head (oral cavity → posterior alveolar region of maledible)	Intraoral examination revealed a pink, defined, pedunculated mass, involving the left posterior maxillary alveolus. On palpation, the mass was well-circumscribed, soft, fluctuant and non tender. The mass showed positive "Slip" sign, meaning the lesion was slipping from observer's fingers during palpation.	On microscopic examination, Haematoxylin and Eosin stained section (10X) shows parakeratinised stratified squamous epithelium in association with underlying dense collagenous connective tissue stroma.		The excised tissue was then dispatched for histopathological examination. A follow-up was done after 15 days reporting no pain and discharge at suture site.
Christos Tsilivigkos /2021 [65]	1	A 56-year-old male	Neck	The mass presented with cervical pain upon weight lifting, while he did not have any signs of neuropathy.	CT showed a bilateral and symmetrical fat mass of the posterior and anterior region of the neck and of the upper trunk, without displacement or infiltration of the trachea.		The excised specimen's size was 27 × 12 × 18 cm, and its weight was 627 g.
Nisha Shetty/2020 [66]	1	51-year-old male	Head (cheek and oral cavity → vestibular sulcus)	Extraoral examination showed a well-circumscribed, firm, and mobile swelling with respect to the right side of the face. The skin overlying the swelling was scarred and pinchable. The swelling was not fluctuant and non-compressible on palpation. There was no evidence of facial nerve palsy or bruit present. Intraoral examination revealed no abnormalities on the right side.	MRI reports revealed a well-defined round-shaped lesion measuring 5.3 × 3.6 × 4.3 cm with few flow voids in right masticator space infiltrating anterior fibers of masseter with extension to right buccal space. Histopathological examination showed angiolipoma diagnosis.		The tumor mass was removed in a plane above the buccinator muscle after ligation of feeder facial, transverse facial, and buccal artery. The patient had an uneventful postoperative course with no recurrence.
Saygo Tomo/2016 [67]	1	58-year-old male	Head (parotid gland)	Extensive swelling in left parotid region.	CT analysis was performed and the lesion revealed was well demarcated and benign in its behavior. FNA of the lesion, which revealed the presence of fat containing benign cells.		Tumor excision was performed by partial parotidectomy, with periauricular incision, facial nerve identification and dissection from the lesion. Two years after surgical removal of the tumor there are no signs of recurrence. Two years after surgical removal of the tumor there are no signs of recurrence.

To be continued

10.59987/ads/2025.3. 263-292

Satesh Kumaran Ganeson/2022 [68]	1	60-year-old male	Head	Patient with with a 2-year history of right-sided hearing loss accompanied by unilateral, non-pulsatile tinnitus.	MRI revealed a small intracanalicular lesion in the distal part of the right internal auditory canal, adjacent to the inferior vestibular/cochlear nerve, measuring 5 mm x 2 mm.	The patient was subsequently maleaged conservatively with an annual MRI follow-up and for 5 years, no changes in the lesion have been observed. The patient has not reported any deterioration of symptoms or quality of life.
Po-Han Lee/2014 [69]	1	65-year-old female	Head (parotid gland)	A painless, right infra-auricular mass, which had been growing slowly. Physical examination showed a 3x2-cm palpable non-tender, round, mobile and elastic mass in the patient's right parotid gland.	CT demonstrated a well-circumscribed and mildly enhanced lesion, located between the right parotid gland and the right masseter muscle. Histopathology of the removed mass further supported a diagnosis of sialolipoma	A revised deep parotid lobectomy was performed on the inner surface of the maledible ramus. The subsequent six months since the surgery have been uneventful and no recurrence has been observed.
Dongbin Ahn/2014 [70]	1	43-year-old female	Head (oral cavity → submaledibular gland)	Swelling in the right submaledibular region. The mass was very soft and movable within the submaledibular region; no tenderness was reported during physical examination.	Ultrasonography showed that the mass was of a relatively heterogeneous, hypoechoic nature, with ill-defined margins compared to typical submaledibular glands. CT image revealed a fatty mass with an irregular margin. The tumor measured 4 cm in its largest dimension and had a fatty consistency like a simple lipoma.	Tumorectomy with preservation of submaledibular gland was performed under general anesthesia via submaledibular incision.
Keshav Gupta/2024 [71]	1	-8-year-old male	Neck	The swelling was soft, non-tender, easily compressible and appeared reducible as on pressing it easily squeezed into potential dead spaces of the neck.	Ultrasonography neck, contrast-enhanced CT neck, and FNAC favored the presence of a lipoma. The histopathology confirmed the presence of lipoma, classified as myolipoma	The excision of the mass was planned in general anesthesia. The patient has been in routine surgical follow-up for the last 1 month.
Takahiro Suzuki/2022 [72]	1	20-year-old female	Neck	The patient's neck appeared asymmetric and exhibited a well-circumscribed enlargement of the right cervical region. The swelling appeared soft and was estimated to be 6 cm in diameter and to extend close to the sternocleidomastoid muscle.	MRI showed a well-circumscribed mass between the cervical skin and platysma muscle. FNAC indicated the lesion to be a lipoma. Microscopically, the tumor was predominantly composed of stellate (spindle) cells, maley of which were large, darkly stained, and exhibited pleomorphic nuclei. Contrary to our expectations, numerous multivacuolated atypical lipoblasts were also observed in surgical specimen.	The mass was completely excised. The postoperative course was satisfactory.

To be continued

Aparna Das/2022 [73]	1	-	Head	Swelling in the submental region	Ultrasonography of the neck suggested a hypoechoic midline cystic lesion. Vascularity was not demonstrated on Doppler images. Microscopic examination showed a cystic lesion lined by acanthotic stratified squamous epithelium displaying preserved granular layer and enclosing lamellated flakes of keratin.	The cyst was excised in toto under general anaesthesia. The postoperative course was satisfactory.
Ghodrat Mohammadi/2014 [74]	1	63-year-old male	Head (parotid gland)	A large slow growing, non-tender, asymptomatic, and soft mass, which had occupied the right parotid area.	CT scan showed a well-defined giant bilobe lipoma arising from the right superficial and deep lobe of the parotid gland	A classic parotidectomy incision was made and the main trunk of facial nerve identified at the stylomastoid foramen that pushed by the tumor inferiorly and deeply. The lipoma was successfully enucleated after full exposure and mobilization of the facial nerve branches. as repositioned to cover the facial nerves before wound closure. The patient experienced an uneventful recovery.
Luis Ángel Garza-Montelongo / 2025 [75]	1	51-year-old male	Neck (laryngeal)	a two-year-onset dysphonia associated with six months of progressive dyspnea and orthopnea. Indirect laryngoscopy was performed, showing an exophytic, pinkish, regular, circumferential supraglottic lesion, which obstructed the hypopharynx	he patient was admitted to the emergency department, where venous blood gas parameters and computed tomography (CT) were conducted (Figure 2). The CT revealed a submucosal lesion at the right paraglotic fatty tissue, which ascended and protruded through the thyrohyoid membrane and extended to the ipsilateral vallecula, epiglottis, and posterior pharyngeal wall. The lesion measured 62 x 30 x 51 mm, obstructing 73% of the hypopharynx, with characteristics suggestive of fibrolipoma. The rest of the studies performed showed no abnormalities.	An urgent tracheostomy was performed under local anesthesia, and no complications were identified. Once the upper airway was secured, a biopsy guided by microlaryngoscopy was performed, reporting a histological diagnosis of fibrolipoma. During the surgical procedure, the removal of the adhesion fibers was performed using a bipolar electrocautery. The tumor excision began with a 15 cm right cervicotomy and dissection of the platysma muscle, localizing the hyoid and dissecting the suprahyoid muscle. A lateral pharyngotomy was conducted afterward, resecting the entire lesion through it. The final histopathological examination revealed a 140 g nodular tumor, measuring 5 x 4.5 x 4.5 cm, covered by a smooth and translucent capsule

10.59987/ads/2025.3. 263-292

10.59987/ads/2025.3. 263-292

Table 3. Risk of bias evaluation of the included studies the Joanna Briggs institute critical appraisal checklist for case reports.

Sl. No	First Authors Name/Year of Publication	1. Were the Patient's Demographic Characteristics Clearly Described?	2. Was the Patient's History Clearly Described and Presented as a Timeline?	3. Was the Current Clinical Condition of the Patient on Presentation Clearly Described?	4. Were Diagnostic Tests or Assessment Methods and the Results Clearly Described?	5. Was the Intervention(s) or Treatment Procedure(s) Clearly Described?	6. Was the PostIntervention Clinical Condition Clearly Described?	7. Were Adverse Events (Harms) or Unanticipated Events Identified and Described?	8. Does the Case Report Provide Takeaway Lessons?	The Overall Risk of Bias
1	Madhu Priya/2020 [7]	No	Yes	Yes	Yes	Yes	Yes	No	Yes	L
2	Y. Najaf/2019 [2]	No	Yes	Yes	No	Yes	Yes	Yes	Yes	L
3	Justyna Tyra/2023 [3]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
4	P. Lomoro/2020/ [4]	Yes	Yes	Yes	Yes	Yes	No	No	Yes	L
5	Vadim Reiser/2020 [18]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
6	Bo Li/2024 [19]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
7	Gholamreza Gholamreza Motazedian/2021 [20]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
8	Shivcharan L Chandravansh/2014 [21]	Yes	Yes	Yes	Yes	Not applicable	Not applicable	Not applicable	No	H
9	Sergio Santoso/2023 [4]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L

To be continued

10	Kamal Nain Rattan/2022 [22]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
11	Sunila Jain/2022 [23]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
12	Deniz Demir/2022 [24]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
13	Ivanka Temelkova/2018 [25]	No	Yes	Yes	Yes	Not applicable	Not applicable	Not applicable	No	H
14	Muhammad Sami Jabbr/2017 [26]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
15	Ahmed A. Zahrani/2021 [27]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
16	Beena R Varma/2020 [6]	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	L
17	Vural Akin/2022 [28]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
18	Kimberly N. Tong/2019 [29]	Yes	Yes	Yes	Yes	Yes	No	No	No	M
19	Jawaher Alrumayh/2024 [30]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
20	Yong Won Lee/2021 [31]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
21	Joyson Kodiyan, B.S/2014 [32]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
22	Pooja Pal/2014 [33]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
23	M. Loudghiri/2023 [34]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
24	Gamze Öztürk/2018 [35]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
25	Sunil Sam Varghese/2023 [36]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
26	Yusei Katsuyama/2018 [37]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
27	Ming Hui Wan/2020 [38]	Yes	Yes	Yes	No	Yes	Yes	No	Yes	L

To be continued

28	Ioannis Tilaveridis/2018 [39]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
29	Matthew G. Crowson/2015 [40]	No	Yes	Yes	Not applicable	Yes	Yes	Yes	Yes	L
30	Fulya Özer/2017 [41]	No	Yes	Yes	No	No	No	No	No	H
31	Christopher L. Kalmar/2020 [42]	No	Yes	Yes	No	Yes	No	No	No	H
32	Nandesh Shetty/2015 [43]	No	Yes	Yes	No	Yes	Yes	Yes	Yes	L
33	Jad Hosri/2024 [44]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
34	Kannan Ranganathan/2017 [45]	No	Yes	Yes	No	Yes	Yes	Yes	Yes	L
35	Paolo Gennaro/2021 [46]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
36	Jagdeep Singh Virk/2016 [47]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
37	Hitoshi Sato/2022 [48]	Yes	Yes	Yes	Yes	Yes	No	No	Yes	L
38	Saibaba Mahalakshmi/2016 [49]	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	L
39	Ben-Zion Joshua/2018 [50]	No	Yes	Yes	No	Yes	Yes	Yes	No	M
40	Satvinder Singh Bakshi/2015 [51]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
41	Adrián Santana Ramírez/2022 [52]	No	Yes	Yes	No	Yes	No	No	No	H
42	Klaudiusz Luczak/2015 [53]	No	Yes	Yes	Yes	No	No	No	No	H
43	Francesco Paparo/2017 [54]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
44	Yunxia Ma/2020 [55]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
45	Chitrawati B. Gargade/2015 [56]	Yes	Yes	Yes	No	Yes	No	No	No	H

To be continued

46	Peter George Deutsch/2016 [57]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
47	Giap Hean Goh/2020 [58]	Yes	Yes	Yes	No	No	No	No	No	H
48	Afshin Teymoortash/2016 [59]	Yes	Yes	Yes	Yes	Yes	No	No	No	M
49	Mohamed S. Rashwan/2023 [60]	Yes	Yes	Yes	No	No	No	No	No	H
50	Liyana Ghazali/2022 [61]	No	Yes	Yes	Yes	Yes	No	No	Yes	M
51	Ida Barca/2019 [62]	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	L
52	Drissia Benfadil/2023 [63]	No	Yes	Yes	No	Yes	Yes	Yes	Yes	L
53	Shreyas N Shah/2022 [64]	No	Yes	Yes	No	Yes	No	Yes	No	H
54	Christos Tsilivigkos /2021 [65]	No	Yes	Yes	Yes	No	Yes	No	Yes	M
55	Nisha Shetty/2020 [66]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
56	Saygo Tomo/2016 [67]	No	Yes	Yes	No	Yes	Yes	No	Yes	M
57	Satesh Kumaran Ganeson/2022 [68]	Yes	Yes	Yes	No	Yes	Yes	No	Yes	L
58	Po-Han Lee/2014 [69]	Yes	Yes	Yes	No	Yes	Yes	No	Yes	L
59	Dongbin Ahn/2014 [70]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
60	Keshav Gupta/2024 [71]	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
61	Takahiro Suzuki/2022 [72]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L
62	Aparna Das/2022 [73]	No	Yes	Yes	Yes	Yes	Yes	No	Yes	L
63	Ghodrat Mohammadi/2014 [74]	No	Yes	Yes	No	Yes	Yes	No	Yes	M
64	Luis Ángel Garza-Montelongo / 2025 [75]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L

Although malignant forms are sporadic, the rapid increase in size and the appearance of painful symptomatology are factors to consider for the proper management of lipomas of the head and neck (8).

It is essential to perform targeted tests that will allow a specific diagnosis for treatment and a favorable prognosis. For this reason, pre-operative instrumental examinations such as ultrasound, CT, or magnetic resonance imaging are necessary before any surgical treatment. Imaging techniques can guide the accuracy of biopsy sampling, allowing the most suspect portion of the lesion to be reached since inflammatory, hemorrhagic, or scar phenomena can create imaging disturbances (5).

Preoperative diagnosis is based on tissue examination, which can be easily obtained via FNAB/FNAC (7).

Ultrasound is a good initial tool for diagnosing lipomas. These masses appear as homogeneous hyperechoic ovoid or lobulate areas with variable characteristics extending deeper into the surrounding tissues. Ultrasound is a simple and inexpensive method, but if the depth of the mass is extended, it does not allow for accurate assessment of the diagnostic suspicion (77, 78).

MRI and CT are the most valuable imaging techniques for safely identifying lipomatous lesions.

In CT, the lipomas appear as homogeneous masses that are well encapsulated with some fibrous septum and hypoattenuated without contrast enhancement. MRI is the preferred instrumental investigation for lipomas, allowing diagnostic confirmation and identifying the exact size, location, and extent of the specific lipomatous lesion. MRI defines the margins of the lipoma, soft tissues, and surrounding structures. MRI lipomas show high signal intensity in T1-weighted images with a progressive decrease in signal intensity in T2-weighted images (7, 8, 24).

Compared to CT, it may have the advantage of a more precise representation of calcifications in the lesion and its relationship with bone structures (77).

Histopathology is essential to establish an accurate diagnosis. The ordinary lipoma consists of mature adipocyte lobules. The cells are identical to the surrounding adipose tissue except for slight cell size and shape variations. (5) Simple lipomas may also contain muscle fibers, blood vessels, fibrous septum, and necrosis or inflammation. All non-adipose intralesional components can confuse the correct imaging diagnosis because they increase the T2 signal and may therefore mimic the results associated with well-differentiated liposarcomas (78). The lipoma must be removed for definitive pathological diagnosis to exclude a liposarcoma, since diagnostic tools cannot differentiate lipoma from a liposarcoma (7).

The therapeutic options for lipoma include non-excisional techniques and excisional techniques. Non-excisional techniques consist of steroid injections and liposuction. The most common and effective treatment for lipoma is simple excision. During excision, the lipoma should be removed with the covering capsule to prevent recurrence (7, 24). The local recurrence rate was estimated at 4-5%.

In cases of intramuscular lipoma, it may be necessary to remove the entire muscle involved or resect a compartment to avoid the risk of recurrence (5).

Conclusions

This study has included more articles with a low risk of bias in the review, so the conclusions are of good quality.

Although head-neck lipomas represent 13% of the total incidence of lipomas, they are a category of benign tumors whose initial diagnosis can be difficult for clinicians. This is particularly possible in cases where the clinician is confronted with masses with non-fat intralesional components.

Therefore, it is good to improve and consolidate knowledge about preliminary instrumental investigations, which, together with the histopathological examination, play crucial roles in defining a correct diagnosis.

References

1. Silistreli OK, Durmuş EU, Ulusal BG, Oztan Y, Görgü M. What treatment modality should be in giant cutaneous lipomas? Review of the literature and report of 4 cases. Br J Plast Surg. 2005 Apr;58(3):394-8. doi: 10.1016/j.bjps.2004.09.005. PMID: 15780237.
2. Herman, R. L. Barnes: Surgical pathology of the head and neck, 2nd edn, revised and expanded in three volumes. Eur Radiol 12, 1866 (2002). https://doi.org/10.1007/s00330-001-1266-1
3. Chatterjee, Shamita & Prasad, Sandeep & Nayak, Sayan & Prasad Mahato, Susenjit. (2015). Anterior Neck Lipoma – A Giant Predicament. Hellenic Journal of Surgery. 87. 203-205. 10.1007/s13126-015-0210-9.
4. Santoso S, Rizqiawan A, Mulyawan I, Wihandono A, Amir MS. Lipoma in Parotid Gland: A Rare Case Report. Eur J Dent. 2023 Jul;17(3):929-934. doi: 10.1055/s-0042-1758795. Epub 2023 Jan 4. PMID: 36599447; PMCID: PMC10569883.
5. De Bree E, Karatzanis A, Hunt JL, Strojan P, Rinaldo A, Takes RP, Ferlito A, de Bree R. Lipomatous tumours of the head and neck: a spectrum of biological behaviour. Eur Arch Otorhinolaryngol. 2015 May;272(5):1061-77. doi: 10.1007/s00405-014-3065-8. Epub 2014 May 7. PMID: 24800932.
6. Varma BR, Kumar KS, Verghese RS, Janardhanan M. Unusual presentation of lipoma on the tongue. BMJ Case Rep. 2020 Apr 14;13(4):e232485. doi: 10.1136/bcr-2019-232485. PMID: 32295795; PMCID: PMC7199149.
7. Priya M, Doomra S, Angral S, Malhotra M, Varshney S, Gupta MK, Bhardwaj A. Head and Neck Lipomas at Uncommon Subsites: A Series of Four Cases. Indian J Otolaryngol Head Neck Surg. 2022 Oct;74(Suppl 2):1845-1849. doi: 10.1007/s12070-020-01866-1. Epub 2020 Apr 30. PMID: 36452686; PMCID: PMC9702117.
8. Najaf Y, Cartier C, Favier V, Garrel R. Symptomatic head and neck lipomas. Eur Ann Otorhinolaryngol Head Neck Dis. 2019 Apr;136(2):127-129. doi: 10.1016/j.anorl.2018.12.001. Epub 2018 Dec 31. PMID: 30606653.
9. Juliasse LE, Nonaka CF, Pinto LP, Freitas Rde A, Miguel MC. Lipomas of the oral cavity: clinical and histopathologic study of 41 cases in a Brazilian population. Eur Arch Otorhinolaryngol. 2010 Mar;267(3):459-65. doi: 10.1007/s00405-009-1010-z. Epub 2009 Jun 27. PMID: 19562364.
10. Ahuja AT, King AD, Kew J, King W, Metreweli C. Head and neck lipomas: sonographic appearance. AJNR Am J Neuroradiol. 1998 Mar;19(3):505-8. PMID: 9541308; PMCID: PMC8338272.
11. Som PM, Scherl MP, Rao VM, Biller HF. Rare presentations of ordinary lipomas of the head and neck: a review. AJNR Am J Neuroradiol. 1986 Jul-Aug;7(4):657-64. PMID: 3088944; PMCID: PMC8334668.

12. Furlong MA, Fanburg-Smith JC, Childers EL. Lipoma of the oral and maxillofacial region: Site and subclassification of 125 cases. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2004 Oct;98(4):441-50. doi: 10.1016/j.tripleo.2004.02.071. PMID: 15472660.
13. Raj AT, Awan KH, Patil S, Morgan P, Warnakulasuriya S. Oral Warty Dyskeratoma: A Systematic Review of the Literature. Diagnostics (Basel). 2022 May 20;12(5):1273. doi: 10.3390/diagnostics12051273. PMID: 35626429; PMCID: PMC9140982.
14. Moher D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA; PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. Syst Rev. 2015 Jan 1;4(1):1. Doi: 10.1186/2046-4053-4-1. PMID: 25554246; PMCID: PMC4320440.
15. Porritt K, Gomersall J, Lockwood C. JBI's Systematic Reviews: Study selection and critical appraisal. Am J Nurs. 2014 Jun;114(6):47-52. doi: 10.1097/01.NAJ.0000450430.97383.64. PMID: 24869584.
16. Tyra J, Mierzwińska-Dolny P, Fishman AJ, Mierzwiński J. Head and neck lipoblastoma in children: A case report and systematic review. Int J Pediatr Otorhinolaryngol. 2023 Oct;173:111699. doi: 10.1016/j.ijporl.2023.111699. Epub 2023 Aug 16. PMID: 37597314.
17. Lomoro P, Simonetti I, Nanni AL, Corsani G, Togni G, Fichera V, Verde F, Formica M, Trovato P, Vallone G, Gorone MSP. Imaging of head and neck lipoblastoma: case report and systematic review. J Ultrasound. 2021 Sep;24(3):231-239. doi: 10.1007/s40477-020-00439-w. Epub 2020 Mar 5. PMID: 32141045; PMCID: PMC8363689.
18. Reiser V, Haj Yahya B, Chaushu G, Kaplan I, Hamzani Y. Angiolipoma in the Head and Neck: Imaging, Diagnosis and Management. Medicina (Kaunas). 2020 Jun 10;56(6):283. doi: 10.3390/medicina56060283. PMID: 32532063; PMCID: PMC7353847.
19. Li B, Fan X, Liu D, Song Y, She C. Giant laryngopharyngeal lipoma. Braz J Otorhinolaryngol. 2024 May-Jun;90(3):101407. doi: 10.1016/j.bjorl.2024.101407. Epub 2024 Feb 21. PMID: 38442639; PMCID: PMC10924132.
20. Motazedian G, Khojasteh A, Salari F, Anbardar MH. Periauricular Angiolipoma: A Case Report. World J Plast Surg. 2021 Sep;10(3):134-137. doi: 10.29252/wjps. 10.3.134. PMID: 34912680; PMCID: PMC8662692.
21. Chandravanshi SL. Encephalocraniocutaneous lipomatosis: a case report and review of the literature. Indian J Ophthalmol. 2014 May;62(5):622-7. doi: 10.4103/0301-4738.133521. PMID: 24881613; PMCID: PMC4065518.
22. Rattan KN, Kalra V, Mangla A, Gupta A. Intermuscular Fibrolipoma of the Neck: A Rare Case Report. Indian J Otolaryngol Head Neck Surg. 2022 Dec;74(Suppl 3):5927-5929. doi: 10.1007/s12070-021-02552-6. Epub 2021 Apr 19. PMID: 36742611; PMCID: PMC9895651.
23. Jain S, Garg S, Aggarwal N. A Large Intraoral Lipoma: Case Report. Indian J Otolaryngol Head Neck Surg. 2022 Dec;74(Suppl 3):6119-6121. doi: 10.1007/s12070-021-02737-z. Epub 2021 Jul 27. PMID: 36742883; PMCID: PMC9895255.
24. Demir D, Eraslan Ö, Güven M, Kösem M. Rare cases of benign tumors of the head and neck: lipoma of larynx and sternocleidomastoid muscle. Kulak Burun Bogaz Ihtis Derg. 2016;26(2):118-22. doi: 10.5606/kbbihtisas.2016.92155. PMID: 26890715.
25. Temelkova I, Wollina U, Di Nardo V, Tchernev G. Lipoma of the Neck. Open Access Maced J Med Sci. 2018 Oct 23;6(10):1875-1877. doi: 10.3889/oamjms.2018.430. PMID: 30455766; PMCID: PMC6236035.
26. Jabbr MS, Hamadi I, Fakoury MMA, Youssef GY. Lipoma of right pyriform sinus. BMJ Case Rep. 2017 Jun 19;2017:bcr2017219872. doi: 10.1136/bcr-2017-219872. PMID: 28630225; PMCID: PMC5534689.
27. Zahrani AA, Qannam A, Al Sadhan R, Bello IO. Sialolipoma of the Floor of the Mouth with Immunohistological Analysis. Case Rep Dent. 2021 Apr 5;2021:6623045. Doi: 10.1155/2021/6623045. PMID: 33927904; PMCID: PMC8049828.
28. Akın V, Okur E, Kumbul YÇ, Okur N, Kum R. Oral Lipoma Resembling Popeye›s Pipe: A Case Report. Cureus. 2022 Feb 17;14(2):e22350. doi: 10.7759/cureus. 22350. PMID: 35371685; PMCID: PMC8938201.
29. Tong KN, Seltzer S, Castle JT. Lipoma of the Parotid Gland. Head Neck Pathol. 2020 Mar;14(1):220-223. doi: 10.1007/s12105-019-01023-3. Epub 2019 Mar 19. PMID: 30888640; PMCID: PMC7021912.
30. Alrumayh J, Albesher M, Alrohaimi F. Deep-seated intermuscular lipoma of posterior neck muscles: a case report and review of literature. J Surg Case Rep. 2024 Jul 18;2024(7):rjae451. doi: 10.1093/jscr/rjae451. PMID: 39036765; PMCID: PMC11258490.
31. Lee YW, Chung J. Intraglandular Ordinary Lipoma of the Submandibular Gland. Ear Nose Throat J. 2021 Sep;100(5_suppl):587S-589S. Doi: 10.1177/0145561319895603. Epub 2019 Dec 30. PMID: 31884818.
32. Kodiyan J, Rudman JR, Rosow DE, Thomas GR. Lipoma and liposarcoma of the larynx: case reports and literature review. Am J Otolaryngol. 2015 Jul-Aug;36(4):611-5. doi: 10.1016/j.amjoto.2014.07.003. Epub 2014 Jul 10. PMID: 25841535.
33. Pal P, Singh B, Sood AS. Unusual parapharyngeal lipoma. Indian J Otolaryngol Head Neck Surg. 2015 Mar;67(Suppl 1):158-60. doi: 10.1007/s12070-014-0797-0. Epub 2014 Nov 13. PMID: 25621276; PMCID: PMC4298618.
34. Loudghiri M, Saout Arrih B, Oukessou Y, Rouadi S, Abada R, Mahtar M. Management of a rare case of parapharyngeal lipoma presentation of case. Int J Surg Case Rep. 2023 May;106:108145. doi: 10.1016/j.ijscr.2023.108145. Epub 2023 Apr 13. PMID: 37080150; PMCID: PMC10140792.
35. Öztürk G, Tunç U, Balaban K, Eyigör H. A Rare Tumor of Palatine Tonsils: Chondrolipoma. Turk Arch Otorhinolaryngol. 2018 Sep;56(3):180-182. doi: 10.5152/tao.2018.3317. Epub 2018 Sep 1. PMID: 30319878; PMCID: PMC6177494.
36. Varghese SS, Varghese A, Paul PA. Retropharyngeal Lipomatous Hamartoma: Case Report and Review of Literature. Iran J Otorhinolaryngol. 2023 Jan;35(126):67-71. doi: 10.22038/IJORL.2022.64205.3197. PMID: 36721419; PMCID: PMC9872263.
37. Katsuyama Y, Shirai T, Terauchi R, Tsuchida S, Mizoshiri N, Mori Y, Kubo T. Chondroid lipoma of the neck: a case report. BMC Res Notes. 2018 Jun 28;11(1):415. doi: 10.1186/s13104-018-3523-2. PMID: 29954455; PMCID: PMC6022339.
38. Wan MH, Tengku Nun Ahmad TE, Naicker MS, Abu Bakar MZ. Congenital tongue base lipoblastoma causing neonatal airway compromise. BMJ Case Rep. 2021 Jan 18;14(1):e239554. doi: 10.1136/bcr-2020-239554. PMID: 33462056; PMCID: PMC7813297.
39. Tilaveridis I, Kalaitsidou I, Pastelli N, Antoniades K. Lipoma of Parotid Gland: Report of Two Cases. J Maxillofac Oral Surg. 2018 Dec;17(4):453-457. doi: 10.1007/s12663-018-1080-9. Epub 2018 Jan 15. PMID: 30344387; PMCID: PMC6181854.
40. Crowson MG, Hoang J, Esclamado RM. Rare cases of large parapharyngeal lipomas. Am J Otolaryngol. 2016 Jan-Feb;37(1):54-8. doi: 10.1016/j.amjoto.2015.09.011. Epub 2015 Sep 10. PMID: 26700262.
41. Özer F, Bal N. A Rare Diagnosis in the Neck During Childhood: Congenital Chondrolipoma. Turk Patoloji Derg. 2017;33(2):161-163. English. DOI: 10.5146/tjpath.2013.01207. PMID: 24715556.
42. Kalmar CL, Patel VA, Slonimsky G. Transoral floor of mouth lipoma resection: A technical multimedia analysis. Am J Otolaryngol. 2020 Sep-Oct;41(5):102572. doi: 10.1016/j.amjoto.2020.102572. Epub 2020 Jun 2. PMID: 32518018.
43. Shetty N, Shabari UB, Jaydeep NA, Patnaik P. Solitary lipoma in the retromandibular region. Indian J Dent. 2015 Jan-Mar;6(1):49-52. doi: 10.4103/0975-962X.151711. PMID: 25767361; PMCID: PMC4357079.
44. Hosri J, Yammine Y, Hadi NE, Aoun J, Mourad M, Hadi U. Intramuscular Lipoma of the Sternocleidomastoid Muscle: A Rare Entity Revisited. Clin Pathol. 2024 Jun 10;17:2632010X241260200. Doi: 10.1177/2632010X241260200. PMID: 38864025; PMCID:

PMC11165958.
45. Ranganathan K, Mathew SA, Sreena NS, Lavanya N. Fat Free Pleomorphic Lipoma of Oral Cavity: A Rare Entity. J Clin Diagn Res. 2017 Mar;11(3):ZD01-ZD03. Doi: 10.7860/JCDR/2017/24609.9357. Epub 2017 Mar 1. PMID: 28511518; PMCID: PMC5427444.
46. Gennaro P, Benedetti S, Cascino F, Gabriele G. Intramuscular lipoma of the temporalis muscle extending to the infratemporal fossa: surgical pitfalls and short literature review. BMJ Case Rep. 2022 Feb 7;15(2):e245465. doi: 10.1136/bcr-2021-245465. PMID: 35131776; PMCID: PMC8823042.
47. Virk JS, Verkerk M, Patel H, Ghufoor K. Massive lipoma of the posterior neck. BMJ Case Rep. 2016 Feb 24;2016:bcr2016214502. doi: 10.1136/bcr-2016-214502. PMID: 26912769; PMCID: PMC4769482.
48. Sato H, Saito Y, Kitajima T, Egawa S, Shimane T. A Case of Cervical Intraneural Lipoma That Was Removed by Intercapsular Resection with No Resultant Postoperative Neurological Deficit. Case Rep Otolaryngol. 2022 Jun 20;2022:4618731. Doi: 10.1155/2022/4618731. PMID: 35769287; PMCID: PMC9236828.
49. Mahalakshmi S, Reddy S, Ramamurthy TK, Shilpa B. Rare Locations of Epidermoid Cyst: Case Reports and Review. Ethiop J Health Sci. 2016 Nov;26(6):595-601. doi: 10.4314/ejhs.v26i6.14. PMID: 28450777; PMCID: PMC5389081.
50. Joshua BZ, Bodner L, Shaco-Levy R. Intramuscular (Infiltrating) Lipoma of the Floor of the Mouth. Case Rep Med. 2018 Mar 20;2018:3529208. doi: 10.1155/2018/3529208. PMID: 29755529; PMCID: PMC5884230.
51. Bakshi SS, Priya M, Coumare VN, Vijayasundaram S, Karanam L. A common tumor in an uncommon location: Lipoma of the palate. Ann Maxillofac Surg. 2015 Jul-Dec;5(2):237-9. doi: 10.4103/2231-0746.175761. PMID: 26981479; PMCID: PMC4772569.
52. Ramírez AS, Gutiérrez SVE, Rodríguez PA, Ortiz OAS, Heredia JNS. Juvenile angiolipoma in the subtemporal region, zygomatic, and pterygomaxillary fossa treated by microwave ablation - A case study and literature review. Surg Neurol Int. 2022 Sep 9;13:409. doi: 10.25259/SNI_501_2022. PMID: 36324923; PMCID: PMC9610127.
53. Luczak K, Dorobisz K, Krecicki T, Janczak D, Chabowski M, Zatonski T. The Lipomatosis of the Parapharyngeal and Retropharyngeal Space: A Case Report. Srp Arh Celok Lek. 2015 Jul-Aug;143(7-8):455-7. doi: 10.2298/sarh1508455l. PMID: 26506757.
54. Paparo F, Massarelli M, Giuliani G. A rare case of parotid gland lipoma arising from the deep lobe of the parotid gland. Ann Maxillofac Surg. 2016 Jul-Dec;6(2):308-310. doi: 10.4103/2231-0746.200335. PMID: 28299278; PMCID: PMC5343648.
55. Ma Y, Zhou B, Wang S. Large lipoma in the subglottic larynx: a case report. J Int Med Res. 2020 Jun;48(6):300060520928786. doi: 10.1177/0300060520928786. PMID: 32495672; PMCID: PMC7273573.
56. Gargade CB, Desai AY. Lipoma of Hard Palate: Commonest Tumour at Rarest Site. Indian J Otolaryngol Head Neck Surg. 2019 Oct;71(Suppl 1):27-28. doi: 10.1007/s12070-015-0951-3. Epub 2015 Dec 17. PMID: 31799162; PMCID: PMC6863472.
57. Deutsch PG, O'Connell J. Laryngeal lipoma: a rare cause of acute intermittent airway obstruction. BMJ Case Rep. 2016 Apr 22;2016:bcr2016215506. doi: 10.1136/bcr-2016-215506. PMID: 27107059; PMCID: PMC4854167.
58. Goh GH, Putti TC, Ngo R, Agaimy A, Petersson F. Primary Pleomorphic Lipoma of the Parotid Gland with Prominent Myxoid Change: Report of a Rare Case Mimicking Carcinoma Ex Pleomorphic Adenoma on Fine Needle Aspiration Cytology. Head Neck Pathol. 2020 Mar;14(1):246-249. doi: 10.1007/s12105-018-00998-9. Epub 2019 Jan 4. PMID: 30610525; PMCID: PMC7021853.
59. Teymoortash A, Hoch S. Congenital Unilateral Agenesis of the Parotid Gland: A Case Report and Review of the Literature. Case Rep Dent. 2016;2016:2672496. doi: 10.1155/2016/2672496. Epub 2016 Nov 8. PMID: 27895943; PMCID: PMC5118519.
60. Rashwan, M.S., El Tabbakh, M.T. Giant anterior triangle neck lipoma with unusual extension: a case report. Egypt J Otolaryngol 39, 31 (2023). https://doi.org/10.1186/s43163-023-00394-3
61. Ghazali, Liyana & Haron, Ali & Mohamad, Irfan & Hassan, Aniza. (2022). Giant intramuscular sternocleidomastoid lipoma. Pediatria i Medycyna Rodzinna. 18. 89-92. 10.15557/PiMR.2022.0012. Ida Barca, Carmelo Lo Faro, Raffaella Cordaro, Daniela Novembre, Chiara Mignogna, Maria Giulia Cristofaro, Maria Giulia Cristofaro. Intramuscular lipoma involving the masticator space: A case report. Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology. Volume 31, Issue 3, 2019, pages 208-211,ISSN 2212-5558, https://doi.org/10.1016/j.ajoms.2019.02.003.
62. Leong P, Kleid S, Mansfield D. Retropharyngeal lipoma causing obstructive sleep apnoea. Respirol Case Rep. 2017 Jul 9;5(5):e00251. doi: 10.1002/rcr2.251. PMID: 28694968; PMCID: PMC5502211.
63. Benfadil, Drissia & Hatab, Rahima & Bellaouchi, Ahlam & Azzedine, Lachakar & Ayoubi, Fahd. (2023). Giant cervico-parotid lipoma. The Egyptian Journal of Otolaryngology. 39. 10.1186/s43163-023-00418-y.
64. Shah, Shreyas & Jain, Garima & Patel, Uday & Shah, Arpan. (2022). Oral Fibrolipoma Arising from Maxillary Alveolus: A Rare Case Entity. JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH. 16. 10.7860/JCDR/2022/58028.16797.
65. Tsilivigkos C, Mastronikolis S, Lygeros S, Tsilimpoti D, Papadas T. Multiple symmetric lipomatosis (Madelung's disease) with symptoms and signs of hypertension, lipodystrophy, and dyspnea: A case report and literature review. Clin Case Rep. 2021 Jun 24;9(6):e04288. doi: 10.1002/ccr3.4288. PMID: 34194793; PMCID: PMC8223890.
66. Nisha Shetty, Adarsh Kudva, Abhay T. Kamath, Mary Mathew, Monica Charlotte Solomon. Giant infiltrating angiolipoma of buccal space—Report of a rare case, Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology, Volume 32, Issue 2, 2020, pages 156-159, ISSN 2212-5558, https://doi.org/10.1016/j.ajoms.2019.10.005. (https://www.sciencedirect.com/science/article/pii/S2212555819302595)
67. Saygo Tomo, Rafael Marques Pereira, Sâmia Alves de Queiroz, Leandro Barbuio Careno, Aline Reis Stefanini, Luciana Estevam Simonato. Sialolipoma of the parotid gland diagnosis and conservative surgical approach: A case report, Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology, Volume 28, Issue 3, 2016, pages 270-272, ISSN 2212-5558, https://doi.org/10.1016/j.ajoms.2015.12.003.
68. Ganeson, Satesh. (2021). Distal Intracanalicular Lipochoristoma: A Rare Case Report. Erciyes Medical Journal. 10.14744/etd.2021.92844.
69. Lee PH, Chen JJ, Tsou YA. A recurrent sialolipoma of the parotid gland: A case report. Oncol Lett. 2014 Jun;7(6):1981-1983. doi: 10.3892/ol.2014.2026. Epub 2014 Apr 2. PMID: 24932274; PMCID: PMC4049673.
70. Ahn D, Park TI, Park J, Heo SJ. Oncocytic sialolipoma of the submandibular gland. Clin Exp Otorhinolaryngol. 2014 Jun;7(2):149-52. doi: 10.3342/ceo.2014.7.2.149. Epub 2014 May 21. PMID: 24917915; PMCID: PMC4050090.
71. Kumar, Gaurav & Gupta, Keshav & Tomar, Shilpa. (2024). The Giant Neck Myolipoma in a Child. An International Journal of Otorhinolaryngology Clinics. 15. 149-152. 10.5005/jp-journals-10003-1468.
72. Suzuki T, Noguchi N, Shirane S, Ansai N, Sato T, Ise K, Murakami K, Murakami K, Nakamura Y, Ohta N. Cervical Liposarcoma Revisited: A Case Report and Scoping Literature Review. Case Rep Oncol. 2022 Oct 3;15(3):881-886. doi: 10.1159/000526862. PMID: 36825093; PMCID: PMC9941791.
73. Das A, Trupthi MC, War SS, Varghese AM. Paediatric submental epidermoid cyst. BMJ Case Rep. 2022 Jul 12;15(7):e250722. doi: 10.1136/bcr-2022-250722. PMID: 35820729; PMCID: PMC9277382.
74. Mohammadi, Ghodrat & Notash, Rezvan. (2013). A rare case of bilobe parotid lipoma: Involving both superficial and

deep lobe of parotid. Egyptian Journal of Ear, Nose, Throat and Allied Sciences. 15. 10.1016/j.ejenta.2013.11.003.
75. Garza-Montelongo LÁ, Cortés-Ponce JR, Jasso-Ramírez NG, Trevino-González JL, Ramos-Marrero HS. Laryngeal Fibrolipoma: A Case Report. Cureus. 2025 Jan 6;17(1):e76998. doi: 10.7759/cureus.76998. PMID: 39912009; PMCID: PMC11796487.
76. Keane, Allison & Warrick, Joshua & Andrews, Genevieve & Choi, Karen. (2021). Pediatric dermoid cyst of the parotid: Case report and review of the literature. Otolaryngology Case Reports. 18. 100258. 10.1016/j.xocr.2020.100258.
77. Jolly SS, Rattan V, Rai S, Kaur K, Gupta A. Intramuscular cavernous haemangioma of masseter muscle - a case report of surgical excision. J Clin Diagn Res. 2015 Apr;9(4):ZD01-2. doi: 10.7860/JCDR/2015/11305.5770. Epub 2015 Apr 1. PMID: 26023649; PMCID: PMC4437165.
78. Murphey MD, Carroll JF, Flemming DJ, Pope TL, Gannon FH, Kransdorf MJ. From the archives of the AFIP: benign musculoskeletal lipomatous lesions. Radiographics. 2004 Sep-Oct;24(5):1433-66. doi: 10.1148/rg.245045120. PMID: 15371618.
79. Paunipagar, B.K., Griffith, J.F., Rasalkar, D.D. et al. Ultrasound features of deep-seated lipomas. Insights Imaging 1, 149–153 (2010). https://doi.org/10.1007/s13244-010-0019-6
80. Gaskin CM, Helms CA. Lipomas, lipoma variants, and well-differentiated liposarcomas (atypical lipomas): results of MRI evaluations of 126 consecutive fatty masses. AJR Am J Roentgenol. 2004 Mar;182(3):733-9. doi: 10.2214/ajr.182.3.1820733. PMID: 14975977.

10.59987/ads/2025.3. 263-292