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To Assess the Role of Contrast Enhanced Ct Neck in the Evaluation of Neck Masses: - Location Pattern at P.B.M. Hospital Bikaner

Preetam [1], Deepika Meena[2], Deepak Meena [3], Manish Kumar Meena [4], G L Meena[5]

[1,5]Department of Radiodiagnosis, SP Medical College and Associate Group of PBM Hospitals, Bikaner, India

[2] Rajasthan Dental College Jaipur, India

[3]Mahtama Gandhi Dental College Jaipur, India

[4] S.N. Medical College, Jodhpur, India

Correspondence Author: Dr G.L.Meena, Department of Radiodiagnosis, SP Medical College & Associate Group of PBM Hospitals, Bikaner, Rajasthan India

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Abstract

Background: Neck swelling or neck mass is a very common presentation encountered in clinical practice.

Materials and Methods: A prospective study of 60 cases in a clinically suspected neck masses was studied for a 1 year period. Contrast enhanced CT of neck was done using Philips MX 16 CT Scanner with 3-5 mm axial sections.

Result: Most common age group of neck swelling was 51-60 years. Female were more common than male. Most common site of neck swelling was Visceral space.

Conclusion: CT has an excellent accuracy in studying location in the neck lesions.

Keywords: Carcinoma, Computed tomography, Infection, Metastatic cervical node, Neck mass.

Introduction

The neck is situated at the junction of head and the trunk and is crucial to the human body as organs responsible for vital functions like respiration, swallowing and circulation. Neck swelling or neck mass is a very common presentation encountered in clinical practice. Because of its highly complex anatomy and physiology, neck disease manifesting as neck swelling can be varied from etiological, pathological and prognostic points of view. The radiological evaluation of neck masses has changed dramatically since the advent of multidetector computed tomography. CT permits precise anatomic localization, extent of the masses and allows for differentiation of solid, cystic and mixed masses.

Materials and Methods

A prospective study of 50 patients who are clinically suspected of neck masses referred from ENT was studied in department of Radiology, Sardar Patel Medical College and Hospital, Bikaner from June 2015 to May 2016. Computed tomography (CT) of neck was done using Philips MX 16 CT Scanners with 3-5 mm axial sections and reformatted images to study in multiple planes. A 4-6 hours of fasting for contrast study and prior written consent was taken.

Inclusion criteria: Palpable neck masses and USG detected neck lesions.

Exclusion Criteria: Trauma patients.

Results:

Age group	No. of patients	%
0-10 years	3	6
11-20 years	4	8

21-30 years	6	12
31-40 years	7	14
41-50 years	6	12
51-60 years	9	18
More than 60 years	15	30
Total	50	100

Table no.1 Age wise distribution of the neck swelling

Most common age group of neck swelling was 51-60 years.

Sex	**No. of patients**	**%**
Male	23	46
Female	27	54
Total	50	100

Table No.2 Sex wise distribution of the neck swelling.

Female were more common than male.

Neck Spaces	**No. of patients**	**%**
Masticator space	4	8
Buccal space	4	8
Parotid space	2	4
Paraphraygeal space	13	26
Retropharyngeal space	2	4
Prevertebral space	3	6
Carotid space	2	4
Submandibular space	2	4
Visceral space	11	22
Pharyangeal mucosal space	4	8
Posterior cervical space	3	6
Total	50	100

Table no.3: Distribution of neck mass in the neck spaces

Most common site of neck swelling were Visceral space.

Discussion

The most common congenital lesions of the neck are thyroglossal duct cysts, branchial cleft anomalies and cystic hygroma. Other congenital masses include hemangioma, teratoma and dermoid. Thyroglossal duct cyst is the most common non-odontogenic cysts that occur in the neck[1, 2]. They account for approx 70% of the congenital neck swelling. It the migration of the thyroglossal duct fails to involute anywhere along its course, a cyst may from because the duct is lined with secretory epithelium. Occasionally remnants of thyroid tissue are found coexisting within these cysts[2] . The pathogenesis of branchial cleft anomalies is controversial. Incomplete obliteration of the bronchial apparatus, primarily the cleft postulated for their development [3] . The closing membrane and pouch are involving in the development of sinuses and fistula. Most branchial cleft anomalies arises from second branchial apparatus. Most lesions present clinically between 10 and 40 years of age, but may present at any age. There is an equal incidence of branchial fistulae, sinuses and cysts in males and females. Branchial sinuses may be familial in origin. The usual presentation is of a smooth non-tender fluctuant mass adjacent to the anteromedial border of the sternocleidomastoid muscle at the angle of the mandible[3]. Cystic hygroma develop from portions of primitive lymph sacs which have been sequestered from primary lymph sacs during embryonic life [4] . Cystic hygroma are often detected at birth and most lesions appear before two years of age. It contain lymphatic cysts ranging in size from a few millimeters to several centimeters in diameter. Cystic hygroma and lymphangioma are considered part of the spectrum[5, 6].

Conclusion

CT has an excellent accuracy in studying location in the neck lesions.

References

1. Ahuja AT, Wong KT, King AD, Yuen EH: Imaging for thyroglossal duct cyst: The bare essentials. Clin Radiol 2005; 60:141-148.

2. Brousseau VJ, Solares CA, Xu M, et al: Thyroglossal duct cysts: Presentation and management in children versus adults. Int J Pediatr Otorhinolaryngol 2003; 67:1285-1290.
3. Shin JH, Lee HK, Kim SY, et al: Parapharyngeal second branchial cyst manifesting as cranial nerve palsies: MR findings. AJNR Am J Neuroradiol 2001; 22:510-512.
4. Zadvinskis DP, Benson MT, Kerr HH, et al: Congenital malformations of the cervicothoracic lymphatic system: Embryology and pathogenesis. Radiographics 1992; 12:1175-1189.
5. Lev S, Lev MH. Imaging of Cystic Lesions. Rad Clin N Am; Sept 2000; 38:1013-1029.
6. Som P: Cystic lesions of the neck. Postgrad Radiol 1987; 7:211-236.