



ORIGINAL RESEARCH PAPER

Otolaryngology

CLINICAL PRESENTATION OF VARIOUS NECK MASSES: AN ANALYSIS

KEY WORDS: neck mass, malignant, non-malignant

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ABSTRACT

The department of Otorhinolaryngology has extended to include the head and neck region also. The mass in the neck is a symptom of any underlying disease in head and neck area. So hereby we use this study to have a detailed clinical knowledge and approach to various neck masses.

AIM: To study the clinical presentation of various neck masses and the clinical differentiation of the malignant and the various non-malignant neck swellings.

MATERIALS AND METHODS: A retrospective study was carried out in the department of ENT, MGMMC, MYH Indore, M.P from April 2012 to October 2013 with a total of 190 patients with neck swelling. A detailed clinical, radiological and pathological assessment of the various neck swelling had been done.

RESULT: Out of 190 patients, 145 were non malignant and 45 were malignant and the incidence of the malignant neck swelling increased with age. Pain and fever were associated with non malignant swellings with 32.1% and 90.4% respectively.

CONCLUSION: The methodological clinical assessment of the various neck masses led to proper diagnosis and management of the patients thus preventing any delay and complications.

INTRODUCTION:

Neck mass is defined as any abnormal swelling in the neck that is visible or palpable or seen in an imaging study^[1]. They are common in both adult and children, but often the underlying etiology varies and are not easily diagnosable. While in children the most common cause is due to infection or in small proportion congenital masses, the most common cause in adults are underlying head and neck neoplasms.

Neck anatomy is divided into various triangle and spaces with sternocleidomastoid and midline as the anatomical landmark. Neck mass in each spaces points out to the disease of the underlying structures of that particular space. Likewise the lymphatic drainage of the head and neck area is divided into seven groups, each group draining particular anatomical area.

Any asymptomatic neck mass in an adult could be an initial or only clinically apparent manifestation of head and neck squamous cell cancer. So timely diagnosis of a neck mass is of paramount importance because delayed diagnosis leads to increased staging and worsens prognosis^{[1],[2],[3]}.

Thus diagnosis of the underlying cause of the neck swelling is the key to the management in a timely manner thus preventing from any further complications.

METHOD:

A retrospective study was carried out in the department of ENT, MGMMC, MYH Indore, M.P. from April 2012 to October 2013 with a total of 190 patients with neck swelling.

A detailed clinical history and general examination was carried out and a detailed clinical examination with respective to size, shape, location, consistency, mobility and movement on deglutition and transillumination was carried out.

The patients are subjected to routine blood investigations and special consideration on thyroid function tests and ESR was carried out. Radiologically patients are subjected to Ultrasonography, Chest Xray and and Xray soft tissue neck and CT neck as a special interest on malignancy was carried. The patient was then sent for Fine Needle Aspiration Cytology as a final diagnostic criteria.

RESULT:

Table 1: Analysis of age wise distribution of the neck masses

	21-30yrs	31-40yrs	41-50yrs	51-60yrs	61-70yrs	71-80yrs
Non-malignant	36	22	16	10	6	0
Malignant	1	4	10	14	11	2

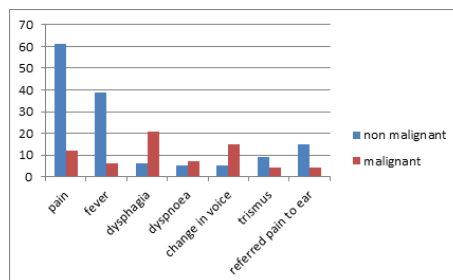
Out of 190 patients, the various clinical presentation of neck mass are analysed.

Table2: Clinical Presentation

SYMPTOMS	NO: OF PATIENTS
Pain in swelling	73
Pain in throat	24
Fever	45
Cough	27
Dysphagia	27
Dyspnoea	12
Change in voice	20
Trismus	13
Ear problems	18

Among the non-malignant neck masses, 112 patients (58.94%) showed chronic and 78 patients(41.05%) showed acute presentations. Out of this 112 chronic patients 52 patients were showing symptoms less 45 days and the remaining 60 patients showed symptoms between 45 days to 1 year.

Fig1: Clinical differentiation between malignant and non-malignant neck mass



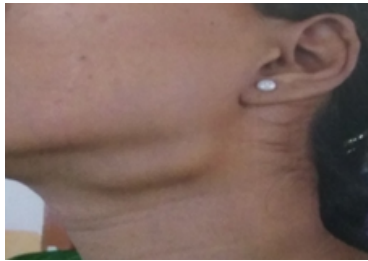


Fig2: Left submandibular pleomorphic adenoma



Fig3: Submental tubercular lymphadenopathy



Fig4: left parotitis



Fig5: Neck secondaries

steps on diagnosing the cause and thus preventing from deterioration of the disease especially of the malignant neck masses where the timely diagnosis increases the five year survival rate.

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DISCUSSION:

Most of the cases are from the rural areas and from low socio economic status and are mostly uneducated. The male population are having tobacco addiction habit and the female population are home bound and ignorant about the nutrition and health leading to many acute and chronic infections.

Among the age wise distribution of the neck masses, it is found that the non-malignant neck masses are common in 3rd and 4th decade while the malignant neck masses are common in 6th and 7th decade. This study is comparable to the study done by Hitendar Basista et al and Manjula et al^{[4], [5], [6]} where they found that inflammatory and benign lesions were found are common below 40yrs while malignant lesions rose sharply after 4th decade.

The neck masses with clinical presentation of fever, pain and cough are associated with acute infections and benign lesions whereas the patients presenting with dysphagia, dyspnoea and change in voice with neck mass are usually associated with malignant counterpart.

Out of 190 patients 61(32.1%) non malignant and 12(6.31%) malignant patients were having pain in swelling, that is pain is more associated with non malignant swelling. Malignant neck masses are usually painless and become painful only when malignant cell infiltrate nerves.

CONCLUSION:

Neck masses are usually a symptom of any underlying silent disease. Thus diagnosing the etiology is a prime factor on the treatment of the disease. This study gives a methodological