



SPECTRUM OF SCALP LESIONS: A CYTOLOGICAL EXPERIENCE

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ABSTRACT **Introduction-** Many benign and few malignant lesions occur in the scalp and are easily accessible for aspiration as fine needle aspiration is safe, non invasive and rapid diagnostic modality. This study was conducted to find out the cytological spectrum of scalp lesions over a period of 1 year in department of pathology, GMC Jammu retrospectively.

Result- A total of 200 cases with swelling scalp specimens reported to the cytology section for Fine needle aspiration. Male constituted 120 cases (60%) and females 80 cases (40%). Age range of cases was from 3 year to 70 year. The highest percentage of patient belonged to age group 21-30 years. Benign lesions (186 cases) were most common followed by malignant cases (6 cases) and 8 cases were unsatisfactory. Keratin cyst was the most common lesion. Among the malignant tumour squamous cell carcinoma (3 cases) was the most frequent.

Conclusion- Non neoplastic lesions were more common than neoplastic lesion. Keratin cyst was the most common histopathological diagnosis. Squamous cell carcinoma was most common among the malignant tumours.

KEYWORDS : scalp, benign, malignant.

Introduction

Scalp lesions are easily accessible for aspiration, fine needle aspiration is safe, non invasive and rapid diagnostic modality. It is vital in preoperative diagnostic and therapeutic decision making as well as avoiding the need of open biopsy at the same time. Both benign and malignant lesions can be diagnosed by FNAC. Many benign entities at this site because of large size may mimic malignancy clinically. FNA offers a rapid diagnosis in benign lesion of scalp differentiates benign from malignant ones (1). In case of malignant lesions FNAC helps to diagnose and type the lesion, so as to guide the surgeon. This study was conducted to find out the cytological spectrum of scalp lesions over a period of 1 years in department of pathology, GMC Jammu retrospectively.

Materials and Methods-

The present study was carried out in the department of pathology, cytology section, over a period of 1 year from April 2016 to March 2017. It was a retrospective study. The data was collected from cytology registration forms. Data on the cytological features, age and sex were retrieved. For all the patients Papanicolaou stained and Romanowsky stained slides were available for review. The lesions were classified as benign lesions, Malignant lesions and Unsatisfactory.

Result

A total of 200 cases were seen out of 2600 patients who reported at cytology section of department of pathology, GMC Jammu for FNA. Male constituted 120 cases (60%) and females 80 cases (40%). Male to female ratio was 1.5:1.

Age range of cases was from 3 year to 70 year. The highest percentage of patient belonged to age group 21-30 years. Malignant cases were common after 40 years of age.

Out of 200 cases studied, Benign lesions (186 cases) were most common followed by malignant cases (6 cases) and 8 cases were unsatisfactory. Unsatisfactory cases showed scant cellularity or diluted aspirate. The spectrum of benign cases included inflammatory, cystic as well as neoplastic lesions. Keratin cyst (92 cases) were the most common lesion which included epidermal inclusion cyst/trichilemmal cyst/dermoid cyst. Second most common lesion was Lipoma (60 cases), non specific cystic lesion 12 (cases), benign adnexal lesion (10), hematoma (8 cases) and fibrohistiocytic lesion (4 cases). Benign adnexal tumours were pilomatricoma 4 cases, cylindroma (3 cases), trichoblastoma (1 case), syringocystadenoma papilliferum (1 case), Nevus sebaceous scalp (1 case).

Among the malignant tumour (6 cases) primary squamous cell carcinoma (4 cases) was the most frequent. Metastatic cases included one case each of malignant melanoma and adenocarcinoma of unknown origin.

Discussion

A total of 200 cases were seen out of 2600 patients who reported at cytology section of department of pathology, GMC Jammu for FNA. Male constituted 120 cases (60%) and females 80 cases (40%). Male to female ratio was 1.5:1. This was similar to that seen in the study by Spitz DJ et al (2).

Age range of cases was from 3 year to 70 year. The highest percentage of patient belonged to age group 21-30 years. Malignant cases were common after 40 years of age. This was similar to study done by Khetrapal S et al (3)

Out of 200 cases studied, Benign (186 cases) were most common followed by malignant cases (6 cases) and 8 cases were unsatisfactory. Unsatisfactory cases showed scant cellularity or diluted aspirate. The spectrum of benign cases included inflammatory, cystic as well as neoplastic lesions. Keratin cyst (92 cases) were the most common lesion which included epidermal inclusion cyst/trichilemmal cyst/dermoid cyst which was similar to that seen in study by Garcia Roja et al (4) and Hingway SR et al (5)

Second most common lesion was Lipoma (60 cases), non specific cystic lesion 12 (cases), benign adnexal lesion (10 cases), hematoma (8 cases) and fibrohistiocytic lesion (4 cases). Similar to that seen in study by Singh M et al (6). Benign adnexal tumours were pilomatricoma 4 cases, cylindroma (3 cases), trichoblastoma (1 case), syringocystadenoma papilliferum (1 case), Nevus sebaceous scalp (1 case). Benign adnexal tumours should be kept in mind in differential diagnosis of scalp masses to avoid overdiagnosis of malignancy.

Among the malignant tumour (6 cases) primary squamous cell carcinoma (4 cases) was the most frequent. Metastatic cases included one case each of malignant melanoma and adenocarcinoma of unknown origin. Similar to that seen in study by Carson et al (7).

Conclusion-

Non neoplastic lesions were more common than neoplastic lesion. Keratin cyst was the most common histopathological diagnosis. Squamous cell carcinoma was most common among the malignant tumours. Fine needle aspiration is safe, non invasive and rapid diagnostic modality and is vital in preoperative diagnostic and therapeutic decision making as well as to differentiate benign from malignant ones.

Table 1 Sex distribution of Soft tissue tumours (excluding unsatisfactory cases)

SEX	Male	Female	Total
Benign tumours	111	75	186
Malignant tumour	4	2	6
Unsatisfactory cases	5	3	8
Total	120	80	200

Table 2- Distribution pattern of various lesions.

Lesion	Subtype	Number (n)	Percentage (%)
Benign Lesion (186)	Keratin cyst	92	46
	Lipoma	60	30
	Non specific cystic lesion	12	6
	Benign adnexal lesion	10	5
	Haematoma	8	4
	Fibrohistiocytic lesion	4	2
Malignant(6)	Primary squamous cell carcinoma	3	1.5
	Poorly differentiated carcinoma mets.	1	0.5
	Adenocarcinoma metastasis of unknown origin	1	0.5
	Malignant melanoma mets.	1	0.5
Unsatisfactory (8)		8	4
Total		200	100

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