IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

CYTODIAGNOSIS OF CHONDROID SYRINGOMA-ECCRINE VARIANT-A RARE CASE REPORT WITH REVIEW OF LITERATURE

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ABSTRACT

Chondroid Syringoma is a mixed tumor of sweat gland origin. We report a case of chondroid syringoma diagnosed cytologically in a 44-year- old female who came with swelling over the left side of cheek since six months.

INTRODUCTION:

- Chondroid Syringomas (CS) are mixed tumours of sweat gland origin described by Bilroth in 1859, that have both benign and malignant forms. They are known as mixed tumours of skin and are composed of both epithelial and myoepithelial components.[1]
- Hirsch and Helwig labelled them as 'Chondroid Syringoma' because of the presence of sweat gland elements which are set in the cartilagenous stroma

.They commonly affect the head and neck region, usually present as asymptomatic, slowly growing mass.[1-10]

- Both eccrine and apocrine variants are described depending on the site of origin. Eccrine variants arise from eccrine glands situated all over the body except in axilla, breast and genital regions. Apocrine variants arise from apocrine sweat glands situated in the skin of axilla, breast and genital areas.[1-10,16]
- The reported incidence of CS among primary skin tumors is low and has been reported at 0.01-0.0098%.
- There are only 10 cases describing FNAC findings of chondroid syringoma reported in literature [1-8,16] at the best of our knowledge.
- We present here the 11th case of Chondroid Syringoma located on the left side of the cheek since 3 months in a 44 year-old-woman diagnosed by FNAC.

CASE REPORT:

- A 44-year-old woman presented with 3 months history of a slowly growing lump on the left cheek over ramus of left mandible.
- The lump was painless and mobile measured 1x1cm. Clinically lymphadenopathy was suspected.
- FNA was performed using a 23 guage needle. Air- dried and alcohol-fixed smears were prepared.The former was stained with Leishman's and latter by Eosin and Hematoxylin method.
- The smears were hypercellular and showed cohesive groups of round cells embedded in a chondromyxoid ground substance and spindly cells closely associated with the myxoid ground substance. The round cells were monomorphous with a moderate to abundant amount of cytoplasm. The nuclei were monomorphic and had fine chromatin. Some of the nuclei were eccentrically placed, like plasmacytoid cells.

  [Figs 1 to 5].

- Based on these findings, a diagnosis of chondroid syringoma was made. It was labelled as eccrine variant of Chondroid syringoma since eccrine sweat glands are seen over the facial region.
- The excised mass showed the histological features of chondroid syringoma[Fig 6].

DISCUSSION:

- Chondroid Syringoma [CS] also known as mixed tumour of the skin is a rare benign adnexal tumour arising from sweat-glands.
- It is thought to originate from both secretory and ductal segments of the sweat glands, and both eccrine and apocrine variants have been described [1-13,15].
- The reported incidence of CS among primary tumors is low and has been reported at <0.098%. [9,10,16] CS usually affects middle aged or older age male patients. [9,10,16.]
- However a case report of chondroid syringoma affecting the child is also found.[13.] In our observation, CS occurred in a 44-year old woman.
- Clinically CS presents typically as a slow growing, painless, firm subcutaneous or intra-cutaneous nodule.
- The lesion commonly measures 0.5-3cm in diameter[2,9,10,15.] However larger forms of CS have also been described[1,14,15].
- The sites for predilection are on the head and neck region, particularly cheek, nose or lip. But this tumor can develop on the scalp, eyelid, orbit, auditory canal, hand, foot, forehead, axillary region, abdomen, penis, vulva and scrotum[3,8-11,15].
- CS is often overlooked because of rarity of this tumors and unremarkable clinical presentation [15].
- The differential diagnosis includes dermoid cyst, neurofibroma, dermatofibroma, basal cell carcinoma, pilomatricoma, histiocytoma and seborrheic keratosis.

- CS lesions usually are not clinically distinctive and the diagnosis is made only on microscopic examination.[2,4,9,10,15]
- There are only few case reports of CS diagnosed by FNAC[1-8,15,16].
- Fine Needle Aspirate yields thick, mucoid, and gelatinous material.
- Microscopic examination shows epithelial and myoepithelial cells embedded in metachromatic chondromyxoid ground substance.
- The nuclei are monomorphic with finely dispersed nuclear chromatin. Some of the nuclei remain eccentrically placed like plasmacytoid cells.
- These findings are so distinctive that it can easily be diagnosed by FNAC[1-8,15,16].
- Immunohistochemical studies show focal positivity for keratin, vimentin, desmin and S-100 protein in the stroma.[2,9]
- Chondroid Syringoma may be treated by different modalities including electrodissection, dermabrasion and vapourisation with Argon or CO_2 laser.
- Because of the risk of malignancy, the first line of treatment is total excision of the tumour and recurrence does not occur if it is excised completely.
- Hence a regular follow up is needed to look for local recurrence and any features of malignancy.
- Tumor greater than 3 cm size has greater likelihood of malignancy.
- The malignant forms occur more commonly in younger female patients and have predilection for occurrence in the trunk and extremities[2,9,10,15].
- Malignant change is characterized cytologically by cellular atypia revealing epithelial cells having scant amount of cytoplasm and markedly pleomorphic nuclei with prominent nucleoli and necrosis[5].
- Malignant lesion is treated by surgical means initially and later on adjuvant radiotherapy with or without chemotherapy.

CONCLUSION:

- Chondroid Syringoma may be considered as a rare differential diagnosis in the swelling of head and neck region and the diagnosis can be easily confirmed by means of FNAC.

REFERENCES:

1. Kumar S,Ghotekar LH, Thapa DM: Diagnosis of ChondroidSyringoma by FNAC. ActaCytol 2003; 47:522-524.
2. Masood S.Hardy NM: Fine Needle aspiration cytology of ChondroidSyringoma, Report of a case. ActaCytol 1988; 32:482-84.
3. Gottschalk, Sabag S, Glick T: ChondroidSyringoma diagnosed by fine needle aspiration, A Case Report.DiagCytopathol 1994; 10:152-155.
4. Rage J, Shet T: Aspiration Cytology in the diagnosis of primary tumours of skin adnexa. ActaCytol 2001; 45:715-722.
5. Mishra K, Agarwal S: Fine Needle Aspiration Cytology of malignant chondroidsyringoma. A Case Report. ActaCytol1998;42:1155-1158.
6. Srinivasan R, Rajwanshi A, Padmanabhan V, Dey P: Fine Needle Aspiration Cytology of ChondroidSyringoma and Syringocystadenomapapilliferum. A report of two cases. Actacytol 1993; 37:535- 538.
7. Agarwal V, Gupta RL, Kumar S, Mishra K, Agarwal S: Malignant ChondroidSyringoma. J Dermatol 1998; 25:547-549.
8. HellinMD ,Onrubia PJA ,Ruiz FM, Merino GE: ChondroidSyringoma in parotid region.Report of a case. An OtorrinolaringolIbero Am 1992; 19: 363-368.
9. Mebazza A, Trabelsi S, Denguezli M, Sriha B, Bela jouzaC.Nouria R: ChondroidSyringoma of the arm. An unusual localization. Dermatol online 2006; 12:14.
10. Agarwal A, Kumar A, Sinha AK, Kumar B, Sabrica KC: ChondroidSyringoma. Singapore Med J 2008; 49:e33.
11. Kaushik V,Balla RK, Nicholson C, De Carpentier JP: The ChondroidSyringoma , Report of a case arising from external auditory canal. Eur Arch Otorhinolaringol 2005; 262:868- 870.
12. Sivamani R, Wadhera A, Craig E: ChondroidSyringoma, case report and review of literature. Dermatol online J 2006; 12:8.
13. Turham- Haktanir N, Sahin O, Bukulmez A, Demir Y: ChondroidSyringoma in a child.pediatrDermatol 2007;24:505-507.
14. Bekerecioglu M, Tercan M. Karakok M, Atik B, Benign ChondroidSyringoma, A confusing Clinical Diagnosis. Eur J plastSurg 2002; 25:316- 318.

15. Kumar B: ChondroidSyringoma diagnosed by Fine Needle aspiration cytology. DiagnCytopathol 2010; 38:38-40.
16. Tokyol C, Aktepe F, YavasBD,Yildiz H, Aycicek A:chondroid Syringoma, A rare case report. ActaCytol 2010; 54: 973-976.
17. YavuzerR,Basterzi Y, Sari A, Bir F, Sezer C: ChondroidSyringoma, A diagnosis more frequent than expected. DermatolSurg 2003; 29: 179- 181.

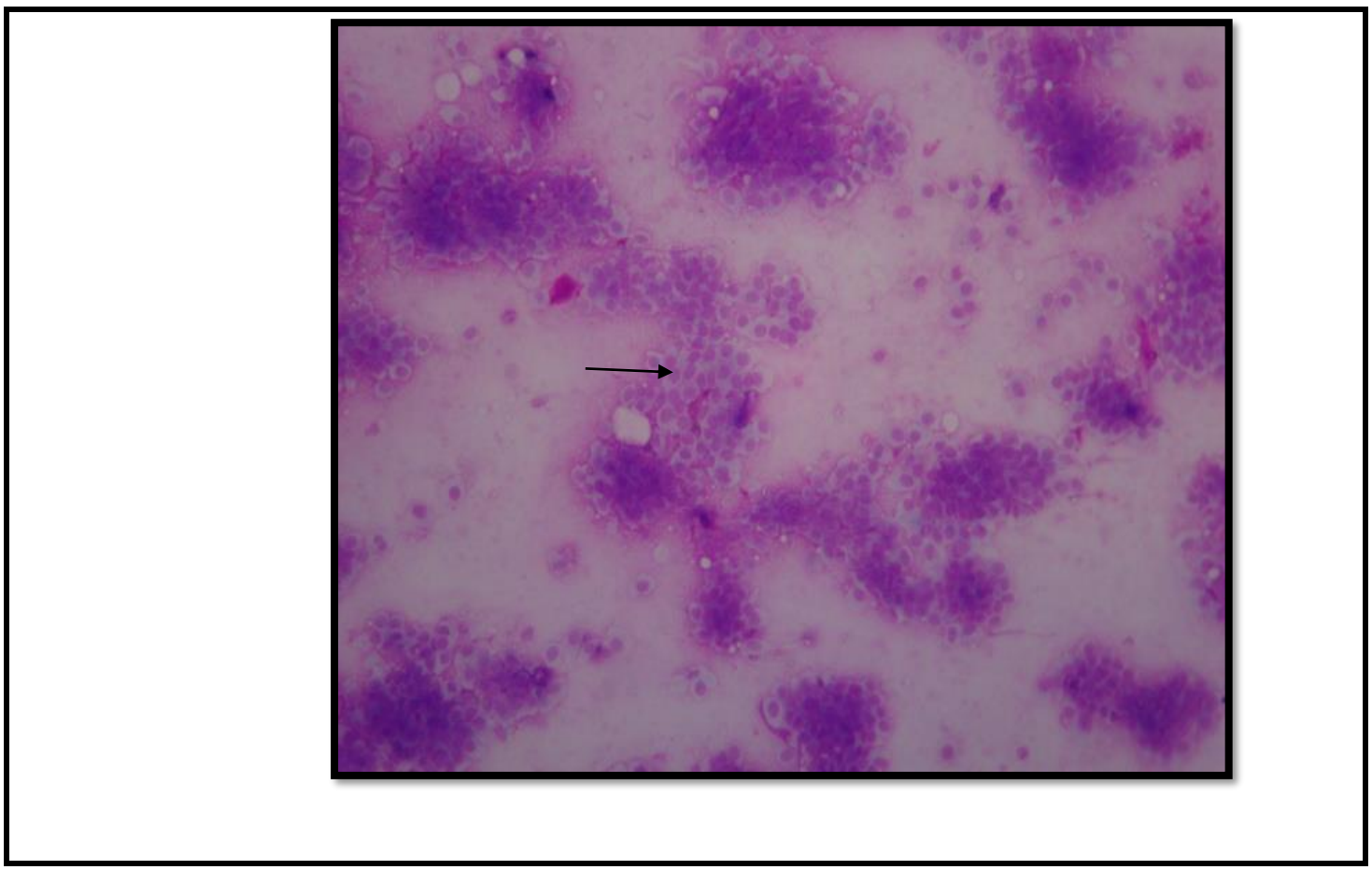

Fig 1: FNAC showing hypercellular smear with cohesive groups of benign epithelial cells against chondromyxoid background[arrow][Leishman's Stain, 100X].

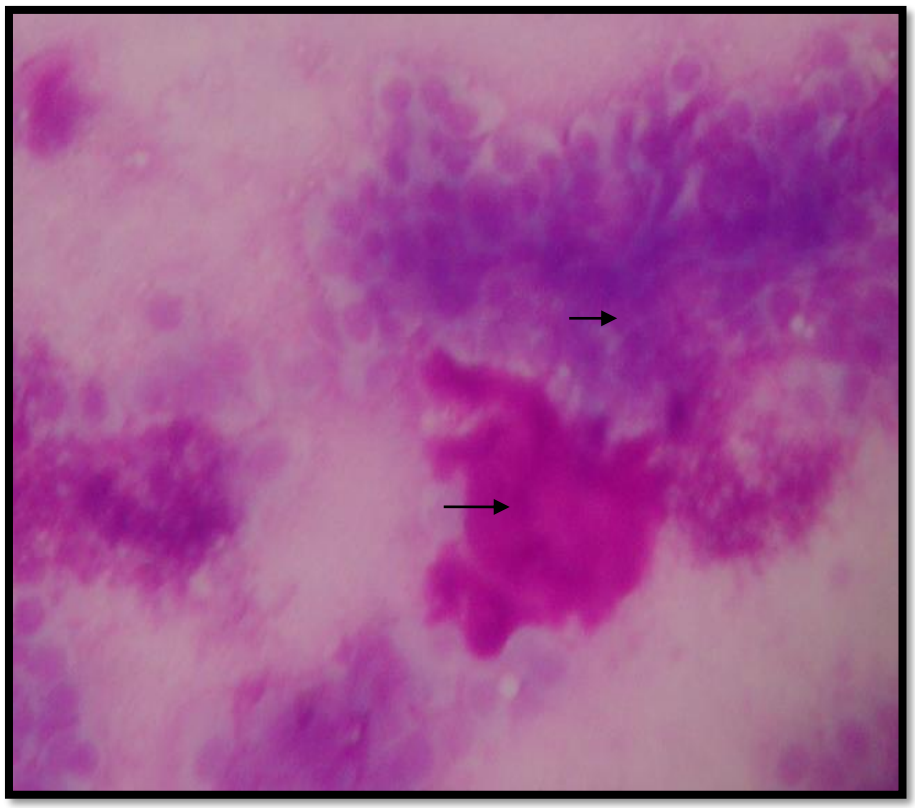

Fig 2 : Showing chondromyxoid background along with benign epithelial cells [arrows]. [Leishman's Stain, 100X]

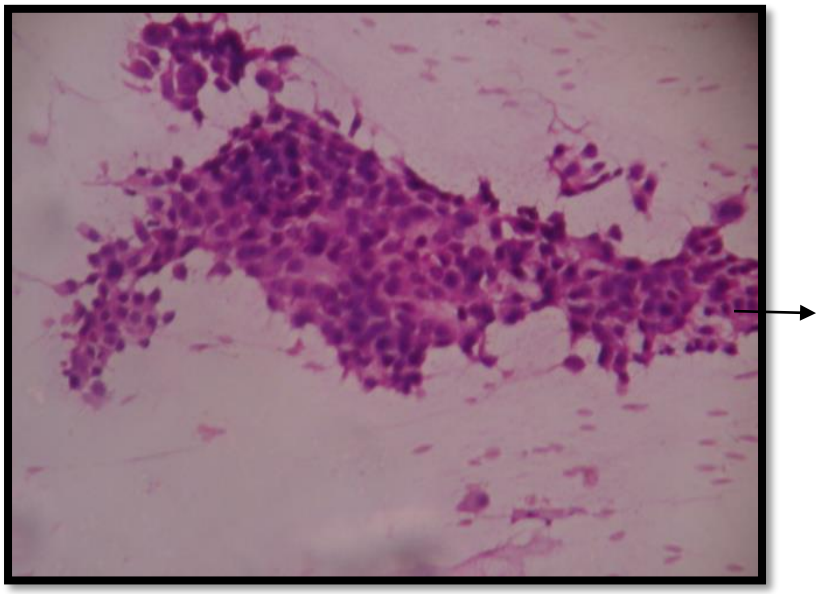

Fig 3 :Showing benign epithelial cells[arrow] [H&E, 100X].

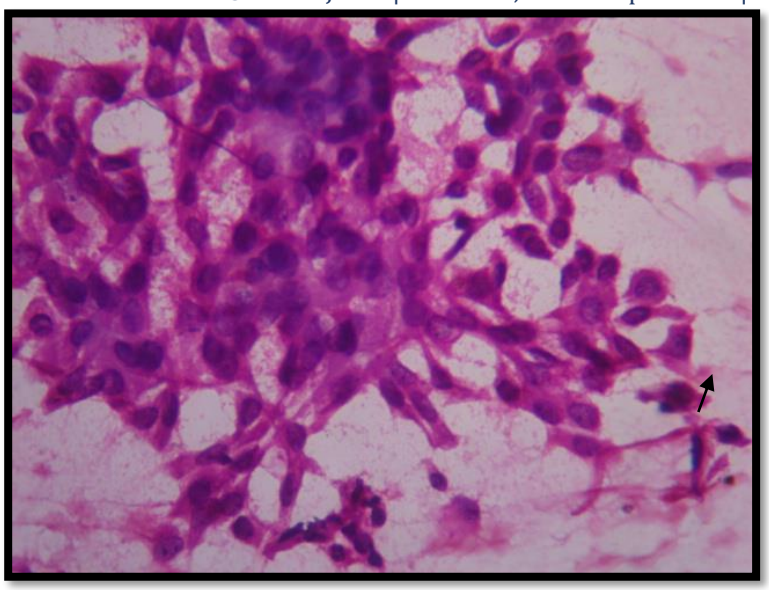

Fig 3a: Showing predominantly spindle shaped cells [arrow] [H&E, 100X].

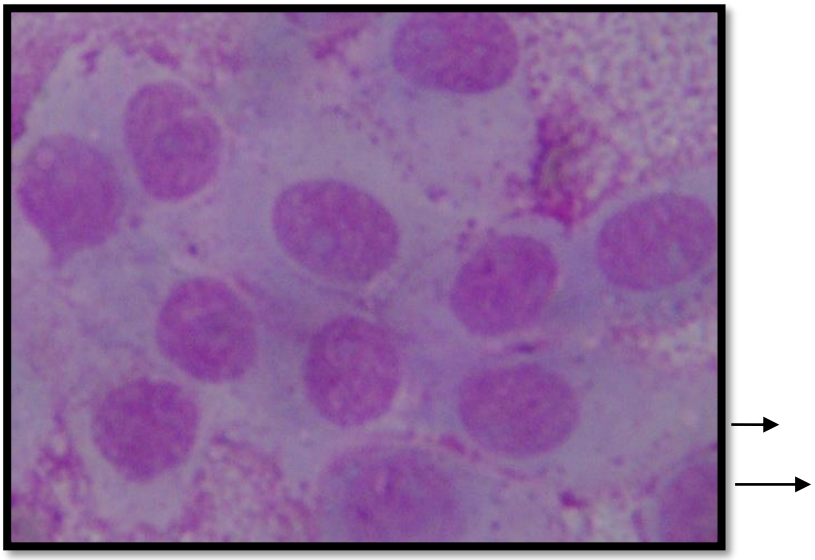

Fig 4: Showing benign epithelial cells [Leishman' s Stain, 400X]

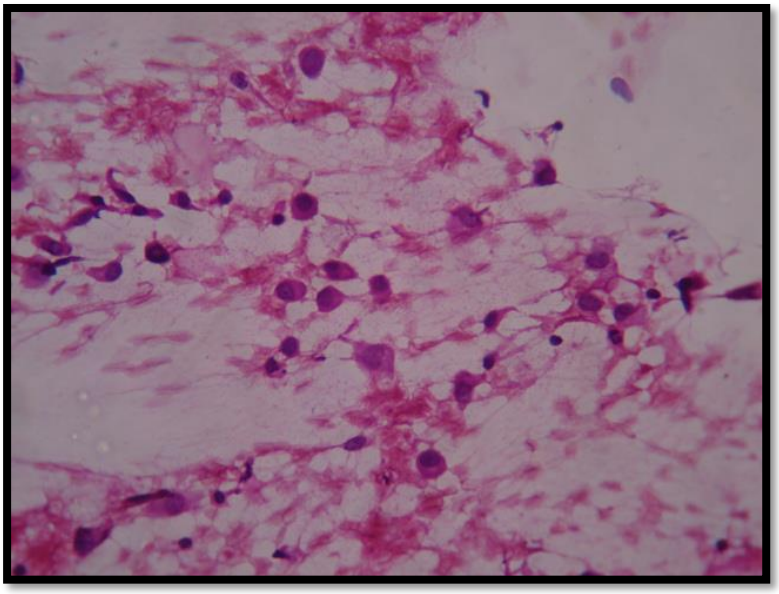

Fig 5: Showing plasmacytoid cells [H&E, 100X].

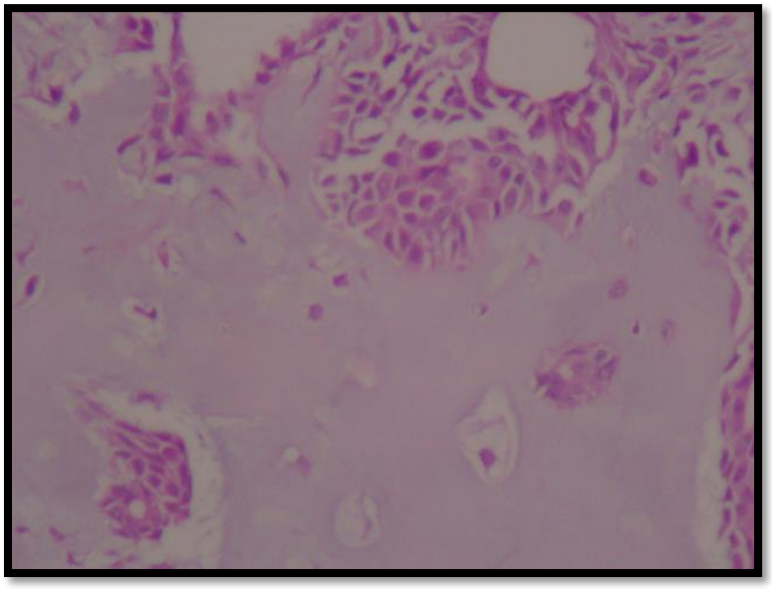

Fig 6:Histopathological section showing chondroid syringoma(H&E,100X)