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CASE REPORT PROF-0-780

A CASE REPORT OF RARE SACROCOCCYGEAL SUBCUTANEOUS MYXOPAPILLARY EPENDYMOMA IN YOUNG ASIAN BOY WITH CLINICAL DIAGNOSIS OF LIPOMA.

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ABSTRACT… Myxopapillary ependymoma is a type of glioma and arising from supportive tissue of brain and spinal cord. It grows slowly.[1] The subcutaneous myxopapillary ependymoma is quite rare tumour and mostly develop in children and adolescents.[2] Several cases of ependymoma are reported in literature with only one case is reported in Asian population. We are reporting a case of 23 years old male having swelling below sacral region and diagnosed clinically as lipoma. The swelling was excised and diagnosed as subcutaneous myxopapillary ependymoma histologically.

Key words: Myxopapillary Ependymoma, Lower back pain, Sacral, Spinal cord tumor, Subcutaneous.

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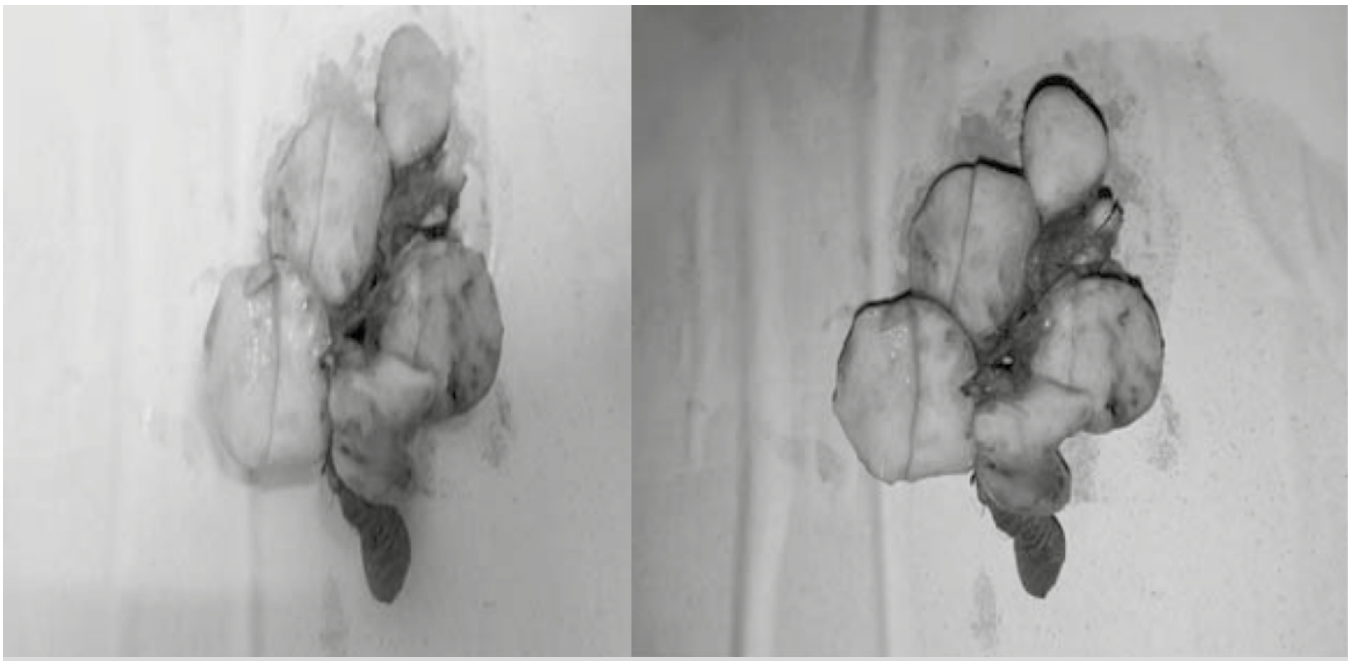
INTRODUCTION

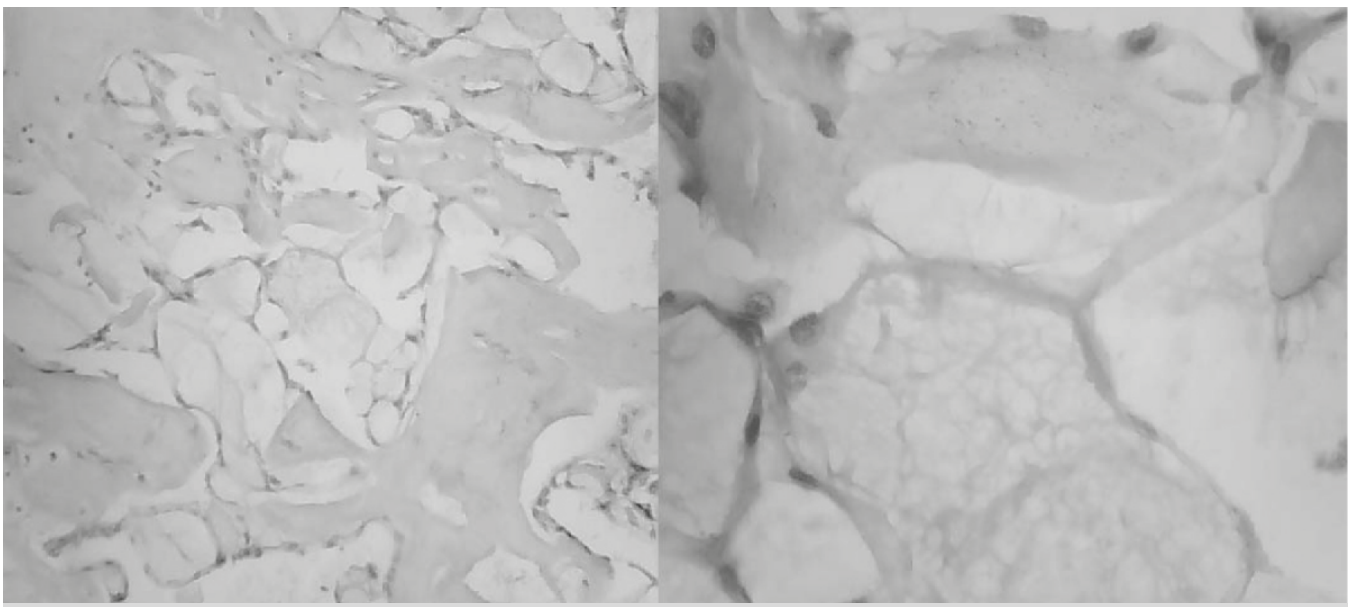
Spinal ependymal tumours are about 40-60% of spinal cord tumour.[3] Most commonly the myxopapillary subtype of ependymomas occur in thoracolumbar region and 90% of tumour occur in conus medullaris.[4] It is a benign and most commonly an encapsulated tumour.[5] Extraspimal ependymomas are rare and mostly occur in subcutaneous tissue of sacrococcygeal or presacral region.[6] The sign and symptoms are non-specific with pain in lower back.[7] Some patients may present with headache, pain, numbness.[8] 8-20% of it occur in childhood. Adult age group from 18-29 years also affected by this tumour.[9] This tumour has good prognosis.[10] The key microscopic feature of this tumour is mucinous degeneration of the papillary tumour vascular stromal core lined by cuboidal cells.[11] Surgical excision of the tumour is mostly done. If it is adhere to cauda equinal or conus medullaris then adjuvant radiotherapy can be done.[12] On review of literature this tumour is rare in Asian only one such case was reported in Asian female.[2] As such not definite relation with race is known.[13] Our patient was a 23 year old Asian male diagnosed as case of subcutaneous Myxopapillary ependymoma sacral region histologically with clinical diagnosis of lipoma.

CASE REPORT

A 23 years old male presented with history of swelling below sacral region that was clinically diagnosed as lipoma and excised. On gross examination, multiple four small well circumscribed nodules along with skin, measured 2.0x1.0x1.0cm, 2.5x2.0x1.0cm, 3.0x2.5x1.5cm and 3.5x3.0x2.5cm. A piece of skin focally was attached to the nodules measuring 3.0x2.8x0.2cm. On cutting the nodules were grayish white with a few small myxoid areas. Representative sections were submitted. On microscopic examination of H&E sections showed hyalinized tissue containing aggregates of papillary structures. The papillae were made by basophilic mucinous material lined by cuboidal epithelial cells. The histological features are consistent with subcutaneous myxopapillary ependymoma. Section of skin reveals no pathology.



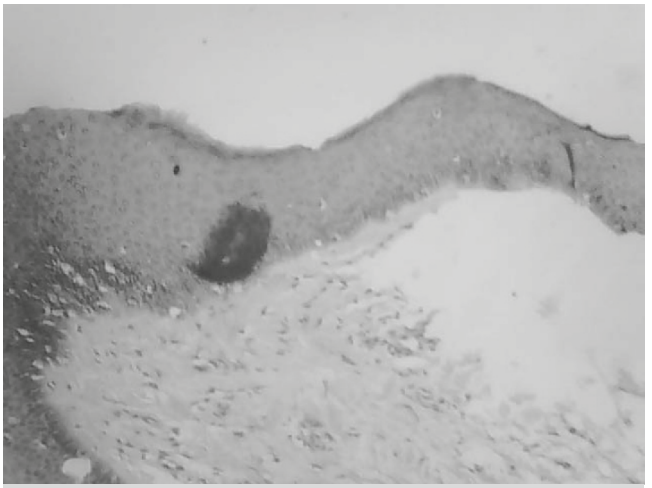
Gross Appearance of the Specimen, Myxopapillary Ependymoma.



Low & High Power Microscopic Appearance of Subcutaneous Myxopapillary Ependymoma (100x&400x).

DISCUSSION

Ependymoma are rare in extraspinal regions.[14] Our patient is also a case subcutaneous myxopapillary ependymoma sacral area. Extradural sacrococcygeal subcutaneous ependymoma are rare representation. The first case in literature was reported by Mallory in 1902.[15] The ependymoma is classified into three subtypes.i.e Myxopapillary, papillary and subependymoma type.[16] Majority of subcutaneous ependymoma are myxopapillary in histology.[17] 50% cases have been reported in posterior sacral or subcutaneous region.[18] As they are localized in sacral region, which leads to a common misleading diagnosis of pilonidal sinus or other tumours like lipoma, teratoma, chordoma, myxoid chondrosarcoma, metastatic mucoid carcinoma and metastatic carcinoid other.[6]



Low Power view shows normal skin histology (100x)

The clinical diagnosis of our patient was lipoma. Myxopapillary ependymoma is differentiated from other tumours by positive GFAP and S-100.[16] The follow up is recommended after local excision as this tumour has potential for recurrence or it may metastatise.[19] So survillence is important.[6]

CONCLUSION

We are reporting a rare case of young Asian male showing histological features of sarococcygeal subcutaneous myxopapillary ependymoma with clinical diagnosis of lipoma. So Myxopapillary ependymoma should be considered in the differentials of sacral area swelling although rare.

REFERENCES

1. Valerie NB et al. **Unique molecular characteristics of pediatric myxopappillary ependymoma.** Brain pathology, May 2010; 20(30):560-570.
2. Lee K,Min B,Seo H and Cho C. **Subcutaneous sacrococcygeal myxopapillary ependymoma in Asian female: A case report.** J ClinMed Res, Feb 2012; 4(1):61-63.
3. Bavbek M, Altinors MN, Caner HH, Bilezikci B, Agildere M. **Lumbar myxopapillary ependymoma mimicking neurofibroma.** Spinal Cord. 2001; 39:449–452.
4. Bagley CA, Wilson S, Kothbauer KF, Bookland MJ, Epstein F, Jallo GI. **Long term outcomes following surgical resection of myxopapillary ependymomas.** Neurosurg Rev. 2009; 32:321–334.
5. Choi JY, Chang KH, Yu IK, et al. **Intracranial and spinal ependymomas: Review of MR images in 61 patients.** Korean J Radiol. 2002; 3:219–228.
6. Lynch J, Regan P, Kelly N, Fitzpatrick B. **A sacrococcygeal extraspinal ependymona in a 67-year-old man: a case report and review of the literature.** British journal of plastic surgery. 2002 Jan 1;55(1):80-2.
7. Ngo TP, Dufton J, **Stern PJ&Islam O.J Can Chiropr Assoc.** 2013 Jun; 57(2): 150–155.
8. Bruce JN. **Ependymoma.** Medscape; Feb 2018. https://emedicine.medscape.com/article/277621-overview.
9. Stephen JH, Sievert AJ, Madsen PJ, et al. **Spinal cord ependymomas and myxopapillary ependymomas in the first 2 decades of life: A clinicopathological and immunohistochemical characterization of 19 cases.** J Neurosurg Pediatr. 2012; 9(6):646–653.
10. Hilden JM, Meerbaum S, Burger P, Finlay J, Janss A, Scheithauer BW, Walter AW, Rorke LB, Biegel JA. **Central nervous system atypical teratoid/rhabdoid tumor: results of therapy in children enrolled in a registry.** Journal of clinical oncology. 2004 Jul 15;22(14):2877-84.
11. Warnick RE, Raisanen J, Adornato BT, et al. **Intracranial myxopapillary ependymoma: Case report.** J Neurooncology. 1993; 15(3):251–256.
12. Nakamura M, Ishii K, Watanabe K, et al. **Long-term surgical outcomes for myxopapillary ependymomas of the cauda equine.** Spine. 2009; 34: E 756–760.
13. McGuire CS, Sainani KL, Fisher PG. **Incidence patterns for ependymoma: A surveillance, epidemiology, and end results study.** J Neurosurg. 2009; 110(4):725–729.
14. Helwig EB, Stern JB. **Subcutaneous sacrococcygeal myxopapillary ependymoma. A clinicopathologic study of 32 cases.** Am J Clin Pathol. 1984; 81 (2):156–161.
15. Mallory FB. **Three Gliomata of ependymal Origin; Two in the Fourth Ventricle, One subcutaneous over the Coccyx.** J Med Res. 1902; 8 (1):1–10.
16. Johnson JM, Jessurun J, Leonard A. **Sacrococcygeal ependymoma: Case report and review of the literature.** J Pediatr Surg. 1999; 34(9):1405–1407.
17. Meriorana A, Fame R, Fano RA. **Myxopapillary ependymoma of the sacroloccygeal region.** Pathologica 1989; 1:471-6.

18. Kline MJ, Kays Dw, Rgiani AM. **Extradural myxopapillary ependymoma: Report of two cases and review of the literature pediator.** Pathol lab medicine 1996; 16: 813-822.

19. Sonneland PR, Scheithauer BW, Onofrio BM. Myxopapillary ependymoma. **A clinicopathologic and immunocytochemical study of 77 cases.** Cancer. 1985; 56(4):883–893.

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