Journal of Paediatric Surgeons of Bangladesh (2017) Vol. 8 (1): 36-37
Official organ of the Association of Paediatric Surgeons of Bangladesh

Journal of Paediatric Surgeons of Bangladesh

Case Report

VAGINAL YOLK SAC TUMOUR IN INFANT : A RARE CASE REPORT

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Abstract:

Malignant germ cell tumors are rare tumors in children accounting for 2-3% of childhood malignancies, usually occurring in midline structures. Yolk sac tumor is one of the form of Germ cell tumor among them extra gonadal yolk sac tumor is rare entity. Vaginal yolk sac tumor usually occurs below 3 years. Its occurrence in vagina is very rare & typically presents with vaginal bleeding, vaginal mass or sometimes mechanical urinary retention. We report a 10 months old girl presented with vaginal bleeding and high Alpha fetoprotein and as diagnosed as yolk sac tumor.

Key word: Yolk sac tumor, Vagina, Alpha fetoprotein

Introduction:

Pediatric Germ cell tumor (GCT) is a rare tumor. Maximum tumor is benign but 20% are malignant.[1] Yolk sac tumor also known as endodermal sinus tumor is one of the malignant germ cell tumor in children that usually involves the gonads (testis & ovaries). Extragonadal yolk sac tumors are very rare (20%). Vagina is an extremely rare primary site.[2] Only few cases had been reported in literature. It is usually occur les than three years of age and highly malignant in nature.[3]

We report a 10 month old girl presented with per vaginal bleeding who finally diagnosed as yolk sac tumor.

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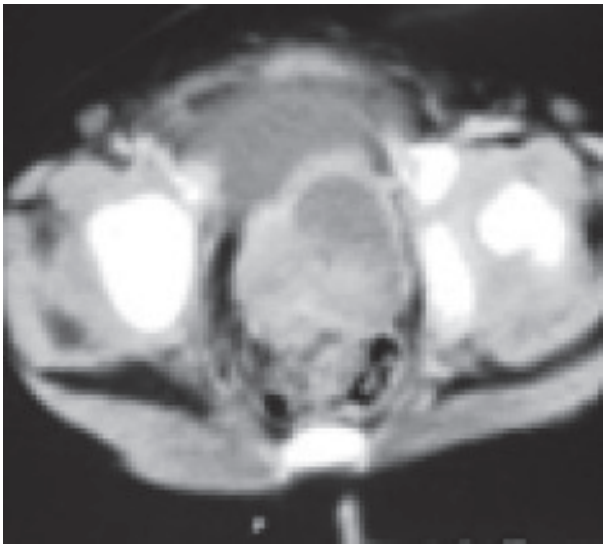
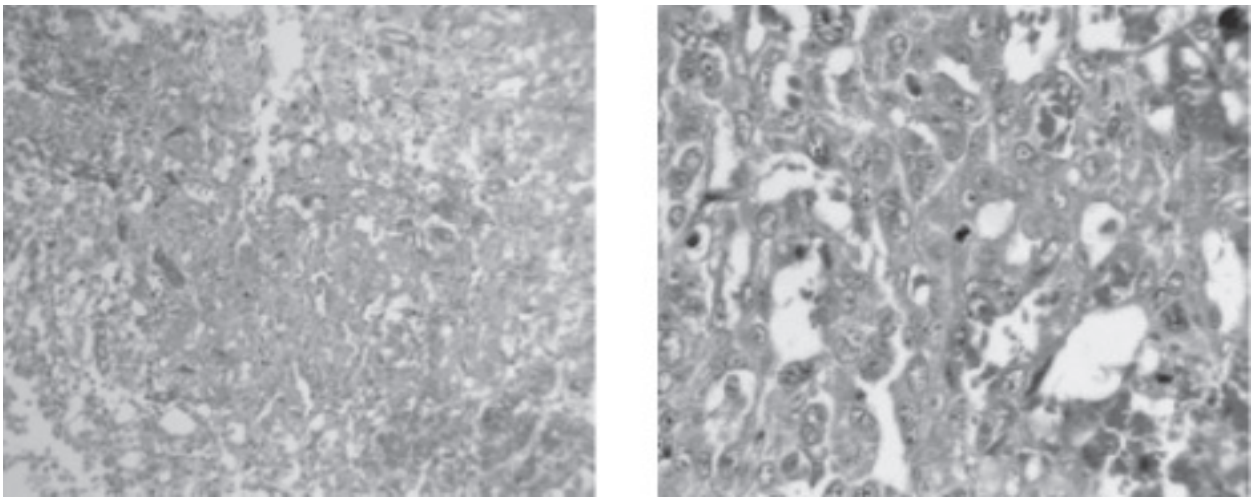
Case report:

A 10 months old girl was presented with per vaginal bleeding for 4 months. She was severely pale (Hb-4.7gm/dl). Imaging studies (USG & CT Scan) showed soft tissue mass (4.2 x 3 cm) having solid & cystic component in pelvic cavity occupying proximal vaginal canal. Serum Alpha-Fetoprotein level was markedly increased (3137 U/ml). The patient was sent to pediatric surgery where excision biopsy was taken. Microscopic examination revealed Yolk Sac Tumor. â-Human Gonadotropic hormone(â -HCG) level was normal. The patient was treated with BEP (Bleomycin, Etoposide, Cisplatin) for 6 cycles. After 1st cycle, a soft mass passed out spontaneously through vagina. So there was no further surgical intervention. AFP level after 3 cycle came down to normal 8.2 ng/ml. She is now alright after 2nd following up visit.



CT scan of pelvic organs (axial view)



Histopatholoy showed tumour composed of sheets of anaplastic cells separated by fibrous septa. In some areas glomeruloid bodies are seen. The tumour is covered by well differentiated stratified squamous epithelium.

Discussion:

There are few cases reported about yolk sac tumor of vagina. Ahmed Alhumidi[2] reported a 6 month old girl with vaginal mass was diagnosed as yolk sac tumor presented with 3days per vaginal bleeding. Partial vaginectomy was done after neo-adjuvant chemotherapy with BEP protocol. Present case also presented with vaginal bleeding but for a longer period with severe pallor. No surgical intervention like partial vaginectomy did not perform because tumor mass spontaneously expulsed. Muhammad Waqas et al[3] also reported a same case month old infant but presented with small jelly like discharge from vagina since birth. This case also did not .perform any surgery. Smita Chauhan[4] from Uttar Pradesh, India also reported 2 cases of yolk sac tumor of vagina presented with bleeding. Bhatt Mihir D[5] also reported a 6 months old baby with yolk sac tumor in vagina and was treated with surgery followed by chemotherapy. Vaginal yolk sac tumor have been treated by some oncologist by exclusive chemotherapy which has also happened this case.[6,7]

Conclusion

Yolk Sac Tumour of vagina is very rare and aggressive but highly responsive to cisplatin based combination chemotherapy. So an integrated team approach can be feasible for the diagnosis to be reached and successful treatment of the tumor.

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