CASE STUDY

A RARE CASE REPORT- RETINOBLASTOMA WITH METASTASIS TO PAROTID GLAND AND VERTEBRA

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ABSTRACT

Retinoblastoma is the most common intraocular malignancy of childhood. Second common primary intraocular malignancy, commonest being choroidal melanoma. Distance metastasis occurs to central nervous system, distal bones, lymph nodes, spinal cord, bone marrow. Metastasis to parotid gland is a rare occurrence. A four year girl presented with a growth in right eye, diminution of vision. There was a swelling over parotid area of right side & metastasis to sixth cervical vertebra. FNAC from the parotid swelling and the tissue of enucleated tumor confirmed retinoblastoma.

Key words:

Retinoblastoma, Metastasis, Malignancy, Intraocular, Choroidal melanoma, Hematogenous dissemination, Anisocytosis, Poikilocytosis, Slough.

INTRODUCTION

Retinoblastoma is the most common intraocular malignancy of childhood, second common primary intraocular malignancy, commonest being choroidal melanoma. Retinoblastoma cells may spread along the optic nerve. Distant metastasis occurs secondary to invasion of subarachnoid space and to hematogenous dissemination. Most common sites of metastasis are Central nervous system, skull, distal bones, lymph nodes, spinal cord, and bone marrow. Metastasis to parotid gland is a rare occurrence.

Case report

A four years old female child had diminution of vision in RE since one year. Parents noticed a white pupillary reflex which gradually increased in size associated with diminution of vision. Patient had a two years old sister who was normal in all respects. There was submandibular lymphadenopathy. The glands were non tender and mobile. There was a swelling over parotid area of right side. An irregular lobulated swelling with firm consistency, skin over the swelling was mobile. The dimensions were 5 cm vertical 7 cm horizontal. No such swelling over left side of face. She had tenderness at the cervicothoracic junction with difficulty in moving the neck. X ray picture of the cervico-dorsal spine showed a concentric lytic lesion in the body of sixth cervical vertebra. A growth was present over the right eye, of size 5 cm in diameter approximately. It was a vascularised growth with slough over the surface, with protosis of 35 mm. conjunctiva was congested, surface uneven, lusterless. Anterior chamber and other details are not seen, due to hazy cornea. VA PL –ve. Left eye was normal in all aspects.

FNAC from tumor mass suggested undifferentiated cells present with large hyperchromatic nuclei. Anisocytosis and poikilocytosis present. It could be retinoblastoma. After giving a course of antibiotics, and NSAIDS and serratio peptidase combination, heavy dose of B-complex Radiotherapy was given with injection of cyclophosphamide with DNS slow IV, the size of the tumor was reduced to an average of diameter 2.5 cm. FNAC from parotid gland and sixth cervical vertebra body revealed round cells with hyperchromatic nuclei and scanty cytoplasm. Infiltration with mononuclear cells seen. Anisocytosis and poikilocyosis present.

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Finding suggestive of secondary from retinoblastoma. Following reduction of size the tumor enucleation was done and excisional biopsy revealed the following features. Undifferentiated cells are tightly packed, round cells with large hyperchromatic nuclei scanty cytoplasm present. Cellular pleomorphism present. There cuboidal or short columnar cells radially arranged around and apparently empty lumen. Areas of necrosis seen. The findings suggestive of retinoblastoma.

DISCUSSION

Retinoblastoma is a rare tumor, occurring in only one in 20,000 life birth. There is no sexual predilection and although the tumor is initially detected in one eye, both eyes are eventually affected in about one in three cases.

Distant metastasis to the skull bones, CNS and lymphnodes are the most common. Metastases to the other flat bones like sternum, iliac bones and vertebra have been noticed. But metastasis to parotid gland is a rare occurrence. It is through hematogenous dissemination.

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