e ISSN 2277 - 3290
Print ISSN 2277 - 3282

Journal of Science

Medicine

www.journalofscience.net

CEREBELLO PONTINE ANGLE TUMOR A CASE REPORT

L.R.Murthy[1] and Sangeeta Das[2]

[1]Professor & HOD, [2]Associate Professor, Department of Ophthalmology,
Mallareddy Institute of Medical Sciences, Hyderabad, Telangana, India.

ABSTRACT

Adequate neuro ophthalmological evaluation goes a long way in the localization of neurological diseases in more than 50% cases. These may include intra cranial infections, Intra Cranial tumors and head injuries. Here we present how a case of Cerebello Pontine Angle tumor presented to us and how it was successfully managed.

Keywords: Adequate neuro ophthalmological evaluation, Cerebello Pontine Angle tumor.

INTRODUCTION

Cerebello Pontine (CP) angle tumors are one of the common infra-tentorial tumors causing the ocular motor disturbances predominantly, in contrast to supra tentorial tumors which usually produce visual sensory disturbances. Loss of corneal sensation is one of the earliest manifestations of cerebello pontine angle tumors. A variegated and complex nystagmus, 6th nerve and 7th nerve palsy along with papilloedema form part and parcel of the picture. [1]

The present paper is a case report of an interesting case of cerebello pontine angle tumor presented to our department with a variegated picture and how it was successfully surgically managed.

Case Report

A Female patient aged 32 years, presented to us with diplopia, Giddiness. Deviation of eyes, vague symptoms of head ache and discomfort in the right eye. She was treated outside for vague symptoms for 2 to 3 months. Not a known case of diabetes and hypertension. No history of fever, convulsions and vomiting. No history of head Injury. She was married having 2 children. Best Corrected Visual Acuity (BCVA), Right Eye (RE) Vision was 6/9, Left Eye (LE) Vision was 6/9. No abnormality was detected in the anterior segment. Intra Ocular Pressure was within normal limits. Pupils were Normal Size Reacting to Light. There was loss of corneal sensation.

There was mild restriction of Right Eye on dextroversion with more diplopia on dextroversion. Horizontal Nystagmus was observed with low frequency and high amplitude – right beating. On levoversion fine High frequency low amplitude horizontal rotary - Left beating nystgmus was seen.

There was weakness of Right Orbicularis oculi indicating paresis of right Lower Motor Neuron type of 7th Nerve. 4th and 3rd nerves were intact. Both eyes fundus picture shows evidence of bilateral papilloedema.

ENT Examination revealed sensory neural deafness on right side. General neurological evaluation shows signs of cerebellar dysfunction. A clinical diagnosis of CP angle tumor was made and investigated. Plain X-ray skull AP & Lateral view was normal. CT Scan was also normal. MRI –Scan- showed right sided CP angle tumor.

MRI Report

A well defined extra axial mass size 3.4 x 3.3 cm is present in right CP angle. The mass was hypo intese on T1W. Heterogenously hyper intense on T2W sequences. On diffusion there was significant restriction. A few flow voids were seen within the mass GRE sequences. There was no intracanalicular extension. The mass displaces the 4th ventricle to the left with ipsilateral compression. Rest of cerebral parenchyma is normal in signal intensity. Impression : Right Vestibular Schwanoma.

Corresponding Author:- **Dr. LR Murthy** Email:- drlrmurty@gmail.com

Case was referred to neurosurgeon and the tumor was removed. Histopathological Examination findings suggested schwannoma - Right cerebellopontine angle showing Antony "A" type cells and Verocay Bodies.One month after surgery patient was feeling better having BCVA RE- 6/60 LE 6/60. Fundus showed early signs of post papilleodemic optic atrophy. Orbicularis occuli palsy is more aggravated. Nystagamus improved.

Figure 1. Showing bilateral papilloedema

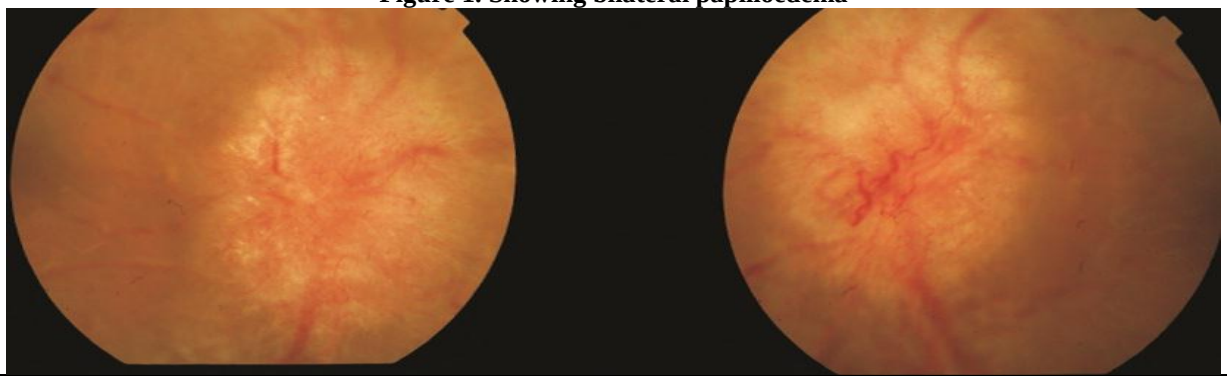


Figure 2. MRI image of the brain

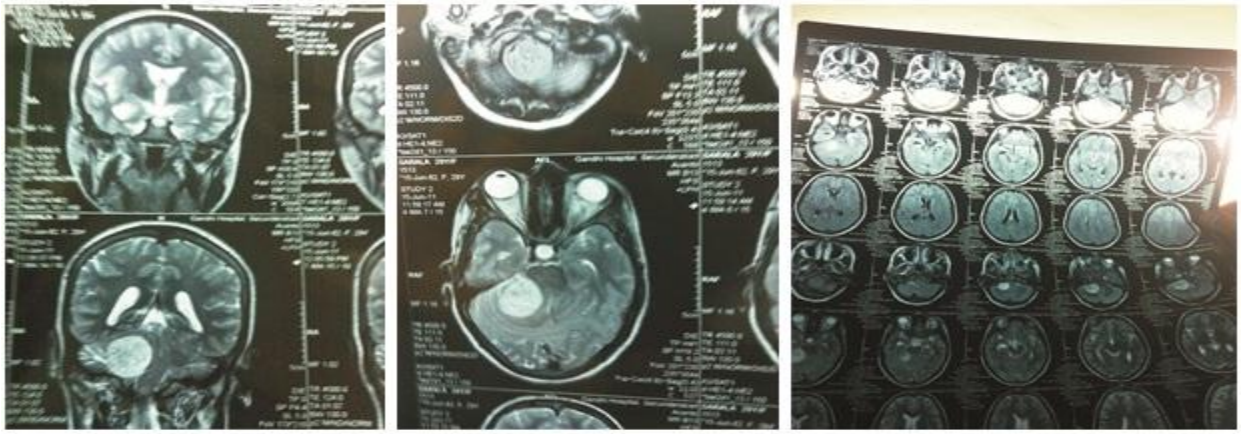
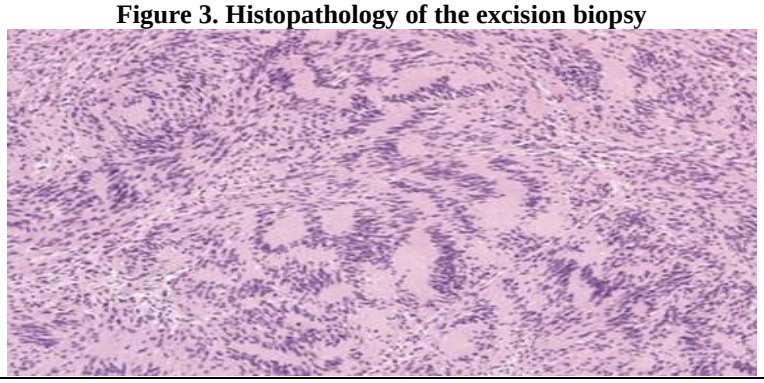


Figure 3. Histopathology of the excision biopsy



DISCUSSION

These are infratentorial tumors, causing predominantly ocular motor disturbances in contrast to supra tentorial tumors which cause visual sensory disturbances. Acoustic neuromas - schewannoma is the best known and common tumor. Meningioma, Ependymoma, Cholesteotoma and osteomas are the remaining CPA tumors. Bilateral schewannomas are seen with neurofibromatosis. Tinnitus, hearing loss, vertigo, sensorineural type of hearing loss are commonly seen. The most prominent loss is to high frequencies. Pure tone decay and poor speech discrimination with abnormal electro nystagmography findings and vestubular hyperactivity on the side of the tumor [2].

A variegated nystagmus – Brun's nystagmus involving vestibular and cerebellar dysfunction. Loss of corneal sensation, with involvement of 5^{th} nerve is one of the earliest symptoms.

5th and 7th nerve involvement leads to exposure keratitis. Ipsilateral 4th and 6th nerve can also be affected. Involvement of ipsilateral Brachium pontis leads to skew deviation with vertical diplopia. Bilateral papilleodema. Signs of cerebellar dysfunction. CT & MRI are diagnostic. Treatment is surgical depending on patient's age, health and the size of the tumor hitherto total or subtotal excision [3]. Vestibular schwannomas may reccur especially after subtotal excision. A most common morbidity after surgery – facial paralysis. Mortality is less than 10% but between 1/3rd and ½ of the patients will die from recurrence of tumors.

CONCLUSIONS

1. Loss of corneal sensation is one of the earliest manifestation of CPA tumor.
2. Proper evaluation of nystagmus helps in the diagnosis.
3. The common morbidity of surgery is facial paralysis as in this patient.
4. Delay in the diagnosis results in the loss of vision due to post neuritic optic atrophy.

REFERENCES

1. Principles and practice of ophthalmology – gholam peyman, (Page 2025, 2026)
2. Emedicine (Author Joe Walter Kutz Jr. MD, Chief Editor, Arlen D.Meyers, MD. MBA.
3. C.P.A. Tumor causing contorlateral trigeminal neuralgia – a case report yand Dy. ET.AL zhonghva yi xue zazhi, (Taipei 1989