

All about Nystagmus

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Abstract

This paper describes about nystagmus, its etiology, clinical features, evaluation and treatment.

Keywords: Nystagmus; Spasmus Nutans

Introduction

It is an involuntary, to and fro eye movement. It may be associated with deterioration of visual acuity or it may present with visual acuity up to 6/9 also. Usually, in case of nystagmus, fixation is unstable as Fixation stability is dependent on Pursuit, optokinetic and vestibular system [1,2].

Etiology

- Unknown usually
- Mainly due to genetics and developmental anomalies during critical and plasticity period.
- Pathology in afferent pathway
- Disorder in oculomotor control
- 13% case may be responsible for cerebral palsy

Characteristics

A. Amplitude

It means how much eye is fixational unstable from the fixation point
Small < 2 degrees
Moderate 2 degree to 9 degree
Large >10 degree
Amplitude of Nystagmus is measured by the millimeter ruler.

B. Direction

Direction of the Nystagmus should be checked once it is diagnosed. It can be Horizontal, Vertical, Torsional or combined.

C. Type

It can be Jerky, Pendular or Mixed

D. Frequency

It shows how frequent nystagmus occurs.

If nystagmus is slow, then it will be < 0.5 Hz

If Nystagmus is moderate, then it will be 0.5 to 2 Hz

If Nystagmus is fast, then it will be > 2 Hz

E. Constancy

It means whether nystagmus is always present or not

F. Symmetry

Here, deviation or movement in all directions is same or not should be checked.

G. Latency

Nystagmus is present in one eyed patient or not.

Clinical Evaluation

“Spasmus Nutans” The meaning of Spasmus Nutans is whether nystagmus is constant or intermittent it should be seen that, it is associated with head nodding. During clinical evaluation, patient should be asked:

- i. Onset: It means when nystagmus is seen since birth or before 6 months of age.
- ii. Associated condition: Patient should be asked about any type of Neurological disorder, Trauma, Infection, Genetic Factor, Medications etc.
- iii. Patient should be asked about Refractive error.

Treatment

To treat the Nystagmus properly, practioner should diagnose exact null point location. In case of Eso

deviation, the null point will be at the nasal Retina and in case of Exo deviation; the null point will be at the Temporal Retina [3-5].

- First step should be full cycloplegic refraction
- Then, RGP contact lenses should be given, because her image clearance is better compared to soft contact lenses. When image will be sharper, nystagmus will be reduced.
- Anti Suppression Therapy
- For a transient period, pharmacological therapy is very essential. Clonazepam (1 to 2 mg) may act upto 72 hours for one dose
- In surgical therapy, primary position should be shifted to the null point

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