Original article

Study of clinical Profile of Optic Neuritis cases: Observational study

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Abstract:

Purpose: Optic neuritis (ON) is a painful disease of inflammation of the optic nerve. The disease is characterized by a single or double-vision loss of vision, often accompanied by peri-ocular pain. Our aim was to evaluate the clinical profile and short-term visual effect of patients with optic neuritis (ON).

Materials and Methods: In this prospective study carried out over a period of one year, 100 eyes of 100 on patients were examined. We randomly included patients visited to our department and confirmed as cases of optic neuritis.

Results: Mean age was 28.55 ± 9.20 years. Female preponderance was seen (72% of cases). Papillitis (59% of eyes) was more common than retrobulbar neuritis (18% of eyes). Bilateral presentation was seen in 21% cases. Baseline median logMAR visual acuity (VA) was 1.7 ± 0.7, which improved to 0.2 ± 0.8, with approximately 66% of eyes retaining VA of 20/40 or more. MS was newly diagnosed in 4 patients. Recurrence was seen in 21% of eyes .

Conclusion: The ON-clinical profile of Indian patients differs from that of Western populations. Contrary to reports in Western literature, papillitis is more common in Indians, with lower recurrence rates but the results are worse.

Keywords: Clinical profile, Optic neuritis

Introduction:

Optic neuritis (ON) is a serious inflammatory disease of the optic nerve. The disease is characterized by a single or double-vision loss of vision, often accompanied by peri-ocular pain. Most cases are of idiopathic origin. However, de-myelination, especially multiple sclerosis (MS), is reported to be the most common etiology in Western literature. [1,2] In India and other Asian countries the incidence of MS is reported to be low. [3, 4,5] In addition, various studies from Southeast Asia have documented differences in etiology, clinical presentation, and ON prognosis compared with Western populations [6] Our goal was to evaluate clinical profile and ON prognosis. temporary visual effect of patients with optic neuritis (ON).

Materials and Methods:

In this prospective study carried out over a period of one year, 100 eyes of 100 on patients were examined. We randomly included patients visited to our department and confirmed as cases of optic neuritis. Sample size was estimated with the help of expert .

ON was diagnosed on the basis of history and clinical examination, which included sudden unilateral or bilateral visual loss of less than 4 weeks duration, presence of relative afferent pupillary defect, dyschromatopsia, and normal or swollen optic disc on fundus examination. Other optic neuropathies, such as ischemic, infective, traumatic, toxic, hereditary, and compressive, were excluded from the study. Patients under the age of 15 were excluded from the study.

Detailed history was obtained, which documented onset of visual loss, duration, association with pain, any previous attack, and history of any other neurological symptoms. Clinical examination included Snellen's visual

acuity (VA), evaluation of pupils, slit-lamp biomicroscopy, and fundus examination. Cases thought to have other neurological deficits were referred to neurologist for evaluation.

The data collected from the patients, were coded and further tabulated. All data analysis had been done by using MS Excel 2010.

Results:

Table 1) Age wise distribution of patients

Age range (Years)	**Number of patients (N=100)**
< 30	62
31 - 40	23
41 - 50	13
> 50	2
Total	100

Table 2) Gender wise distribution of patients :

Gender	**Frequency**
Male	28
Female	72
Total	33

Table 3) Diagnosis – analysis of patients:

Diagnosis	**Number of patients (N=100)**
Papillitis	59
Retrobulbar neuritis	18

We found 55% RBN, 39% papillitis while 6% neuroretinitis patients .

Mean age was 28.55 ± 9.20 years. Female preponderance was seen (72% of cases). Papillitis (59% of eyes) was more common than retrobulbar neuritis (18% of eyes). Bilateral presentation was seen in 21% cases. Baseline median logMAR visual acuity (VA) was 1.7 ± 0.7, which improved to 0.2 ± 0.8, with approximately 66% of

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Discussion:

In our study, mean age was 28.55 ± 9.20 years. Female preponderance was seen (72% of cases). Papillitis (59% of eyes) was more common than retrobulbar neuritis (18% of eyes). Bilateral presentation was seen in 21% cases. Baseline median logMAR visual acuity (VA) was 1.7 ± 0.7, which improved to 0.2 ± 0.8, with approximately 66% of eyes retaining VA of 20/40 or more. MS was newly diagnosed in 4 patients. Recurrence was seen in 21% of eyes .

Optic neuritis (ON) is a serious inflammatory disease of the optic nerve. The disease is characterized by sudden loss of vision of the unilateral eye of the affected eye, which is often accompanied by periocular pain. Most cases are natural idiopathicin however removal of myelination especially multiple sclerosis is reported as the most common combination in western literature. [1,2]

Data from the eastern part of the world, Asian countries suggest that the profile of optic neuritis patients in this region differs from that of western populations. [2 - 7]

After the resolution of optic neuritis, almost all patients show some signs of optic nerve damage and even when the patient's sharpness returns to 20/20, the abnormalities often persist with other mechanisms such as sensitivity, color vision, and visual acuity. Visible loss may be subtle or profound and may occur within hours (rare) to days (usually). Thenadir is usually 1 week after onset. [10]

Most common types of optic neuritis occur in a subconscious or MS-related condition. Based on the Optic Neuritis Treatment Trial (ONTT), both idiopathic-related and MS have positive therapeutic effects [5].

In contrast, most atypical optic neuritis have significant visual recurrence if left untreated or as a result of delayed treatment [3, 6-9].

Conclusion:

The ON profile of ON patients in India is different from that of Western people. Contrary to reports in Western literature, papillitis is more common in Indians, with lower recurrence rates but the results are worse.

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