THE OPTIC NEURITIS TREATMENT TRIAL:
FIVE-YEAR NEUROLOGIC FOLLOW-UP RESULTS

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The Optic Neuritis Treatment Trial (ONTT), a multi-center study funded by the National Eye Institute, enrolled 457 patients between 1988 and 1991. Entry criteria included a diagnosis of acute unilateral optic neuritis with visual symptoms of eight days or less, age between 18 and 46 years, no previous history of optic neuritis or ophthalmoscopic signs of optic atrophy in the affected eye, no evidence of a systemic disease other than multiple sclerosis that might be associated with the optic neuritis, and no previous treatment with corticosteroids for multiple sclerosis or optic neuritis in the fellow eye.

Patients were randomly assigned to one of three treatment regimens: (1) intravenous methylprednisolone 250 mg every 6 hours for 3 days followed by oral prednisone 1 mg per kilogram per day for 11 days; (2) oral prednisone 1 mg per kilogram per day for 14 days; or (3) oral placebo for 14 days. Each regimen was followed by a short oral taper.

Standardized neurologic examinations were performed at baseline and in follow up after six months, one year, and then yearly.

Five-year follow up of the cohort has now been completed. Data to be presented will include:

- cumulative incidence of MS within five years after optic neuritis
- development of MS by treatment group
- factors predictive of the development of MS
- clinical features of the optic neuritis associated with low and high risk of MS
- predictive value of CSF changes in relation to MRI abnormality
- neurologic disability rating in patients who have developed MS
- risk of development of systemic diseases other than MS (ie, connective tissue disease, sarcoidosis)

THE OPTIC NEURITIS TREATMENT TRIAL:
FIVE-YEAR VISUAL FUNCTION FOLLOW-UP RESULTS

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Patients were randomly assigned to one of three treatment regimens: (1) intravenous methylprednisolone 250 mg every 6 hours for 3 days followed by oral prednisone 1 mg per kilogram per day for 11 days; (2) oral prednisone 1 mg per kilogram per day for 14 days; or (3) oral placebo for 14 days. Each regimen was followed by a short oral taper.

Measures of visual acuity, visual field, contrast sensitivity and color vision were made at seven visits during the first six months, after one year, and then yearly.

Five-year follow up of the cohort has now been completed. Data to be presented will include:

- visual function 5 years after optic neuritis in all patients, by treatment group, and by MS status
- incidence of recurrent optic neuritis in all patients, by treatment group and by MS status
- visual function following recurrences of optic neuritis
- factors predictive of recurrences of optic neuritis