Triplopia

Thirteen Patients From a Neurology Inpatient Service

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Background: Seeing triple is a rare complaint, so anatomically unlikely that it is often considered a diagnostic symptom of hysteria. However, in addition to functional causes, triplopia has been reported with refractive errors of the lens and cornea, strabismus, intoxications, and cerebral polyopia. Since, to my knowledge, no one has evaluated the symptom of triple vision among a large group of neurological patients, I reviewed my experience with triplopia.

Methods: Inpatients with a spontaneous symptom of triple vision were selected from my files of 13,400 patients. All were personally examined on the neurology and neurosurgery wards of the University of Southern California–Los Angeles County Medical Center during a 34-year period. Diagnoses were based on history and physical examination, aided by laboratory studies, cerebrospinal fluid analysis, and contemporary contrast studies or computed tomography and magnetic resonance imaging, as clinically indicated.

Results: Thirteen patients reported seeing objects in triplicate (Table). Their ages ranged from 22 to 59 years, with a mean age of 40 years. Seven were women. All had acute triplopia that coincided with the onset of disconjugate gaze or nystagmus in 11 patients. In 8 patients with ocular motor abnormalities, seeing triple was a brief binocular experience that usually converted to diplopia or blurred vision within a day or two. In general, triplopia coincided with gaze in the direction of maximal nystagmus or ocular dissociation and disappeared when nystagmus was minimal or the eyes were conjugate.

In the 4 patients with internuclear ophthalmoplegia (Table), the paretic eye provided 1 image and 2 images were associated with the eye manifesting abduction nystagmus. In 2 patients with third nerve palsies (1 having dissociated nystagmus) and 2 with sixth nerve palsies (1 having nystagmus), apportioning the 3 images was less definite.

Five patients (representing 1% of my patients with functional complaints) had monocular diplopia in each eye (monocular triplopia in 1 patient), unchanged by pinhole viewing, and were considered to have psychogenic triplopia. In these patients, triplopia remained constant regardless of the direction of gaze. Remarkably, 3 of these patients also had eye movement abnormalities (third nerve palsies). The remaining 2 patients (1 of whom later developed functional...
blindness and quadriplegia) had no neurological signs and were considered to have isolated functional triple vision.

**COMMENT**

Most patients with triplopia in the present study had eye movement abnormalities (11/13 [85%]). Eight (62%) of the 13 patients appeared to be offering triplopia as a novel interpretation of oscillopsia or binocular diplopia, whereas the remaining 5 patients (38%) exhibited monocular diplopia or triplopia, with or without ocular motor abnormalities, as a functional complaint. The difference between the 2 groups may merely reflect an increasing degree of suggestibility.

In summary, among general hospital neurological inpatients, triple vision was usually associated with abnormal eye movements. Patients with triplopia should not be dismissed as having strictly functional disease but rather they should undergo a careful ocular motor examination.

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**REFERENCES**