Diplopia

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Diplopia derives from the Greek *diplo-*, double and *-wpia*, from eye (hence vision).

Strabismus or squint is a common, but not invariable accompaniment. Strabismus originates in Greek *strabos* – squinting, squint-eyed. The various forms of squint are called *tropikos* (Greek – to turn), their direction being indicated by the appropriate prefix: *cyclotropia*, *esotropia*, *exotropia*, *hypertropia* and *hypotropia*.

Most strabismus arises in disorders of the extraocular muscles or their peripheral innervation. But in Parinaud's syndrome (*Paralysie des mouvements associés des yeux* [1]), there is a central or supranuclear paralysis of vertical gaze resulting from damage to the mesencephalon. Parinaud wrote:

'Dans l'étude des paralysies motrices de l'œil, on semble admettre que la lésion est toujours périphérique ... Mais, le plus souvent, la lésion est centrale ...'¹

In his 10 case histories, he distinguished two groups: (1) the partial or dissociated paresis of both oculomotor nerves and (2) conjugate eye movement disorders.

Shakespeare appreciated that the perception of double vision resides not in the eye but in the brain. His romantic Sonnet 113 begins:

'Since I left you, mine eye is in my mind;
And that which governs me to go about
Doth part his function and is partly blind ...'

The last line confirms this concept:

'My most true mind thus makes mine eye untrue.'

Shakespeare also refers to double vision in *A Midsummer Night's Dream*, Act IV, Scene I 92–5:

DEMETRIUS 'These things seem small and undistinguishable, Like far-off mountains turned into clouds.'

HERMIA 'Methinks I see these things with parted eye, When every thing seems double.'

Hughlings Jackson coined the term *mental diplopia* to describe, in the dreamy state of partial complex seizures:

'The patient recognised his "recollections" as different from normal memories, being much more vivid and more "satisfactory", but, at the same time, was dimly aware of their fictitious character, indicating some preservation of consciousness, thus resulting in the "mental diplopia" characteristic of the dreamy state' [2].

¹ In the study of motor paralysis of the eye, one seems to assume that the lesion is always peripheral ... But, most often, the lesion is central.

References

- 1 Parinaud H: *Paralysie des mouvements associés des yeux*. Arch Neurol 1883;5:145–172.
- 2 Jackson JH: On a particular variety of epilepsy ('intellectual aura'), one case with symptoms of organic brain disease. Brain 1888;11:179–207.