

Isolated oculomotor nerve palsy in mild traumatic brain injury: A literature review

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Background

Isolated oculomotor nerve palsy (ONP) is rarely encountered after mild traumatic brain injury (TBI). It is difficult to offer patients accurate management strategies or prognostic assessments because only a few reports have described the management of ONP.

Methods

We performed a search for all clinical studies of isolated ONP after mild TBI published up to December 14, 2017. We placed no restrictions on language or year of publication in our search, and we searched the following keywords: traumatic brain injury, isolated oculomotor nerve palsy, mild head trauma, management, and prognosis.

Results

We identified 13 cases of isolated ONP after TBI. Except for two cases of incomplete ONP with pupil sparing, the degree of ONP was complete. In three cases, steroids were used to manage the ONP. Five patients who had underlying brain lesions underwent surgery, and six patients were observed and followed up. The time to partial or complete resolution was 6.2 months \pm 5.8 months with a range of 0.5 to 18 months.

Conclusion

Observation is considered to be sufficient management for isolated ONP after TBI because there are no set guidelines. We can expect improvement in ONP without specific management within approximately 6 months after the accident.