

## **Optic chiasm and optic nerve hemorrhages in head trauma- Pavel Timonov- Medical University-Plovdiv, Bulgaria**

**Pavel Timonov**

Medical University-Plovdiv, Bulgaria

### **Abstract**

Statement of the problem: Fatal head trauma is a major cause of death in children and adults. Postmortem differentiation of nonaccidental head trauma from accidental head trauma can be a complicated process. Methodology and theoretical orientation: Many studies have focused on the importance of optic nerve sheath hemorrhage as a postmortem finding in cases of Shaken Baby Syndrome, but this research has a strong impact on adults. Complete autopsies were performed on 20 adults died of acute intracranial injuries after head trauma induced by acceleration-deceleration forces. Findings: Optic chiasm and optic nerve hemorrhages were noted in all cases. Their mechanism of production may result from severe rotational and translational acceleration. Conclusions: Therefore, this investigation should be performed in all autopsy cases where an accidental head trauma is suspected and where there is no reliable history/witnesses, confession or antemortem examination. Moreover in suspected case of subdural hematoma in adults, these findings may be used as an additional method in enabling the establishment of traumatic subdural hematoma from non-traumatic subdural hematoma