Terson haemorrhage in patients suffering aneurysmal subarachnoid haemorrhage: a prospective analysis of 60 consecutive patients

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OBJECTIVE
The concomitance of vitreous/subhyaloid haemorrhage (Terson syndrome; TS) and aneurysmal subarachnoid haemorrhage (aSAH) is commonly underestimated. The aim of this study was to determine the incidence of TS and to identify parameters that predispose its development, indicate the severity of the underlying disease, and predict outcome.

METHODS
Sixty consecutive patients suffering from aSAH were included in this study. The admitting Glasgow Coma Scale scores (GCS), Hunt & Hess (H&H) and Fisher grades were documented. All participants were ophthalmologically examined. The outcome at discharge was estimated using the Glasgow Outcome Scale (GOS).

RESULTS
Of the 60 patients admitted for aSAH, eleven (18.3%) displayed TS within 24h after aneurysm rupture. Statistical analysis revealed a significant relation between TS and either high Fisher- (3.0 vs. 2.32; p=0.008) or H&H- (4.09 vs. 2.69; p=0.001) and low GCS- (5.55 vs. 12.87; p<0.001) scores. Compared with the non-TS group, patients with TS displayed generally worse outcomes (mean GOS 2.09 vs. 3.53; p=0.007), including a significantly higher mortality (36.4 vs. 10.2%; p=0.028).

CONCLUSION
Terson syndrome is likely to occur in severe aSAH with poor admission scores and indicates a worse functional outcome. An ophthalmological examination is strongly recommended in aSAH patients with poor admission scores.