

Prevalence Of Hypertensive Retinopathy In Hemorrhagic Stroke Patients

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Purpose

To review correlation between different stages hypertensive retinopathy and the association with hemorrhagic stroke as a predictor and prognosis tool.

Materials and Methods

A case control study involving 51 hemorrhagic stroke patients, and 50 hypertensive patients as control were recruited, fundoscopy examination was performed and graded according to severity based on Wong and Mitchell hypertensive retinopathy classification, with demographic data, vital signs, GCS on admission, clot volume, Kanaya basal ganglia classification, surgical intervention and ICH score data were collected.

Results

Study group 41.2% had mild retinopathy and 58.8% had moderate retinopathy. In mild retinopathy group 52.4% had a clot volume less 10ml, while 63.3% of patient in moderate retinopathy group had clot volume more then 30ml, GCS of 13-15 were predominant in mild retinopathy group, with GCS of 3-12 in moderate retinopathy group. ICH score of 0 and 1 had mild retinopathy with ICH Score of 3 and 4 were moderate retinopathy, ICH score 2 had both retinopathy groups but 72.7% were moderate retinopathy. ICH score of 0,1 and 4 treated conservatively, while score of 2 and 3 had surgical treatment.

Conclusion

Hypertensive retinopathy prognosis for moderate severity was associated with larger clot volume and higher ICH score requiring surgical treatment to improve outcome, while mild retinopathy had smaller volume and could be treated with medical therapy. Moderate hypertensive retinopathy screening predicts a likely risk of hypertensive haemorrhage stroke. Community based follow up on hypertensive patients to predict hypertensive hemorrhagic stroke based on retinopathy changes is needed.