Intracranial hemorrhage as complication of thrombolysis and its impact on outcomes of stroke patients in a state-wide registry.

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Intracranial hemorrhage (ICH) is a serious complication of thrombolytic treatment (TT) for stroke. However, the likelihood of occurrence and outcomes of ICH in clinical practice need further study. METHOD: The rate of ICH among TT treated strokes, the in-hospital and 1–year mortality were investigated in the Myocardial Infarction Data Acquisition System (MIDAS), a statewide database of cardiovascular disease hospitalizations in New Jersey. Logistic regression and Cox proportional models were used to assess the likelihood of ICH and its impact on the outcomes. Odds ratio or hazard ratio and their 95% confidence interval were reported. RESULTS: From 1998 to 2006, 1687 acute strokes received TT. ICH occurred among 8.0% of the patients that received TT, compared to 0.5% of those not (p<0.0001). There were no differences on their age (68.9 vs 69.8), gender (61.6% vs 52.8% male), hypertension (68.4% vs 67.9%) and diabetes (21.8% vs 20.0%) for patients with ICH compared to those without (all p>0.05). Atrial fibrillation increased the risk of ICH by 2.4 times (1.4–4.0). Average length of stay (LOS) for TT patients without ICH was 8.9 days, their LOS were extended to 14.7 for those with ICH (p<0.0001). In-hospital death was 36.8% for patients with ICH compared to 12.8% for those without (HR: 1.9, 1.03–3.8). In contrast to the serious impact of ICH on in-hospital death, patients discharged alive had no significant difference on their 1 year mortality (HR: 1.4, 0.6–3.6). CONCLUSION: ICH is a server complication of TT for strokes. Successful management of ICH could further help improve the survival of these patients.