Management of non-traumatic, non-aneurismal intracerebral hemorrhage

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Abstract

Background: Intracerebral hemorrhage is the second most common form of stroke after ischemic stroke. Common causes of spontaneous intracerebral hemorrhage are: hypertension, amyloid angiopathy, aneurysmal hemorrhages and vascular malformations. The purpose of this study was to evaluate the modalities of medical and surgical management of patients with non-traumatic intracerebral hemorrhage. Non-traumatic intracerebral hemorrhages account for 9 to 27% of all strokes worldwide. In total, the incidence of intracerebral hemorrhage varies from 12 to 31 cases per 100.000 patients. The incidence of intracerebral hemorrhages increases with age, doubling every 10 years after the age of 35. Neuroimaging is clinically important for the rapid diagnosis of intracerebral hemorrhage and the underlying etiology, but also for identifying the risk of hematoma growth, often associated with an unfavorable prognosis. Assessing the risk of hematoma expansion is both an opportunity for therapeutic intervention and a potential danger to hematoma removal surgeries. Mortality at 30 days after intracerebral hemorrhage ranges from 35 to 52%. Half of the deaths occurs in the first 2 days after onset.

Conclusions: Despite the lack of a specific course of treatment for intracerebral hemorrhages, the mortality rate has decreased in recent decades, possibly due to advanced supportive treatment and better control of risk factors and secondary prevention. The reduction in mortality is, however, counteracted by the increase in the number of neurologically deficient survivors.

Key words: intracerebral hemorrhage, intracranial hypertension, management.

Overview of vascular dementia

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Abstract

Background: Vascular disease contributes from 25 to 50 percent of cases of dementia, and vascular dementia is the second most common type of dementia in clinical and population studies, surpassed only by Alzheimer's disease. Vascular dementia refers to any dementia caused primarily by cerebrovascular disease or cerebral flow disorder and can be included in the spectrum of vascular cognitive impairment. Vascular dementia is a syndrome, not a disease and can be caused by any stroke or cardiovascular disease that leads to vascular injury or brain dysfunction, including any of the mechanisms of ischemic stroke (e.g., cardiac embolism, large vessel atherosclerosis, small vessel disease), or hemorrhagic stroke. The diagnosis of vascular dementia is not complete until cardiovascular risk factors have been identified, as this information is needed to develop a secondary prevention plan. Similar to vascular dementia, vascular cognitive deficit is a syndrome that can be caused by any cerebrovascular and cardiovascular disease that leads to vascular brain damage or dysfunction. Neuroimaging has greatly improved the ability to detect and diagnose strokes and silent manifestations of cerebrovascular diseases that affect cognition. Treatment includes the management of vascular risk factors, as well as pharmacological and non-pharmacological approaches.

Conclusions: The term "vascular cognitive impairment" refers to "cognitive impairment that is caused by / or associated with vascular risk factors". Better control of vascular risk factors may prevent development or progression of vascular dementia, but no effective treatment is known at this time.

Key words: dementia, vascular cognitive impairment, stroke, risk factor.

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