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Stroke Among the Chinese

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Stroke is the leading cause of mortality in Mainland China while it is the most frequent cause of disability in North America. Asians are more prone to have intracranial vascular stenosis and lower incidence of Carotid Stenosis than Caucasians¹. In order to study in a systematic fashion the epidemiology of cerebrovascular diseases among Chinese living in North America, preliminary retrospective studies from Toronto, New York City and San Francisco were analysed. The data on Stroke patterns, risk factors and outcomes from these three centers will be presented and compared.

In this multi-center analysis, the percentage of patients with intracerebral hemorrhage varies between 19.2 to 29.6% while a recently published report from the People's Republic of China indicates it is at 27.5%². The percentage of stroke patients with hypertension is between 63.5% to 75.6% while a report from Taiwan indicates it is as high as 85% in patients with lacunar infarctions³. Only 6.4 to 11.9% of the stroke cases in this series are found to have significant (>70%) carotid stenosis and this is quite comparable to the low incidence of 10.9% reported from Taiwan. Because a high proportion of these stroke patients suffer from Diabetes Mellitus and/or smoke, these may be contributing factors to intracranial vascular stenosis.

The pathophysiological mechanism of specific stroke patterns among Chinese living in North America may be multi-factorial. Genetics, dietary factors, Cultural and life-style patterns need to be studied through collaborative epidemiological research among centers where there are large cluster of Chinese residents. It is by studying the stroke patterns of successive generations of Chinese living in North America, which may provide further insight into the interaction between genetics and environment⁴. This will ultimately translate into a better understanding of the pathophysiology of stroke among Chinese. Hopefully, this will provide solid scientific evidence whereby health promotion initiatives can be aimed towards specific stroke risk factors among the Chinese population. Ultimately, it will result in reduced stroke mortality and morbidity within our community.

References

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