Stroke

Pain after stroke: a neglected issue

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Pain is a frequent but poorly studied long term consequence of stroke. In this issue of the *Journal of Neurology, Neurosurgery and Psychiatry*, Jönsson *et al* (***see pages 590–5***) have prospectively evaluated the prevalence and intensity of pain in 297 stroke patients from the population based Lund Stroke Register.[1] They found that 4 months after stroke onset, one third of patients were complaining of moderate to severe pain, and that 1 year later, one fifth were still experiencing moderate to severe pain and that the intensity of the severe pain had increased.

This study is of importance as it underlines that pain is frequent after stroke and is multifactorial in origin: pre-stroke pain, post-stroke functional recovery, and mood disorders all contribute to pain status. However, vascular risk factors and stroke characteristics, besides stroke severity, do not seem to play an important role.

At 4 months after stroke, half the patients considered that the pain was related to the stroke, but 1 year later, the proportion had decreased to one third, suggesting the possible interference of associated diseases. Accordingly, only 1% of patients were diagnosed as having central post-stroke pain. The delay between stroke and pain assessment, however, also plays an important role: in Jönsson's study, approximately 10% of patients with pain developed symptoms more than 2 months after stroke. This finding suggests that a long follow-up period is necessary to evaluate post-stroke pain as pain may occur months or years after a stroke.[2] Also, because of the complex nature of post-stroke pain, a diverse therapeutic strategy must be employed.

In stroke survivors, the quality of life may be altered because of the functional and cognitive consequences of stroke and mood disorders.[3] The results provided by Jönsson *et al* suggest that pain influences the quality of life of stroke survivors: pain is frequently described as constant over time, disturbing sleep in one half of patients, and requiring temporary rest, movement, or a change in position in 25–50% of patients. To what extent pain alters the quality of life in stroke survivors, however, remains undetermined and should be evaluated in long term follow-up studies.

Further research is also necessary to more precisely evaluate the various mechanisms of pain, the impact of medications and non-pharmacological treatments according to the various mechanisms and aetiologies, and the influence of comorbidity (especially rheumatological conditions) and anxiety, which is frequent in the first months after stroke.[4] The relationship between post-stroke depression and pain, suggested by Jönsson's results, also remains to be further evaluated: post-stroke depression is frequent,[5] is a major barrier to effective pain relief, and is a very important contributor to the impairment of quality of life after stroke.[6]

Because of the high prevalence of pain in stroke patients, it is necessary to educate physicians, including neurologists and stroke physicians, who, in most cases, do not consider pain an important concern in stroke patients, as suggested by the small number of publications on this topic.

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