

Plasma serotonin in patients with chronic tension headaches

Sir: It was interesting to note that Anthony and Lance¹ successfully replicated the earlier findings relating to low platelet serotonin in patients with tension headache.² Their findings confirm that chronic tension headache is a low serotonin syndrome, and resembles migraine biochemically. I would like to point out that their findings also suggest that chronic pain resembles depressive disorder wherein low plasma serotonin have also been reported.³ The definition of chronic tension headache used by the authors in fact is the same as the definition of chronic pain,⁴ which has been well recognised as a variant of depression by clinical, family morbidity and biochemical studies.⁴ Lowering of uptake rate of serotonin in platelets has been noted specifically in endogenous depression⁵ and not in schizophrenia⁶ or neurotic depression.⁵

As in chronic tension headache (or chronic pain) loss of serotonin is likely to be continuous. It would have been interesting if the authors had discussed their findings in relation to those in studies on depression and perhaps emphasised the closer link between chronic pain and depression rather than that between chronic pain and migraine, though all three seem to be hyposerotonin syndromes.

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Two other cases of unilateral essential tremor, induced by peripheral trauma

Sir: We also had the opportunity of studying two cases of unilateral essential tremor triggered by peripheral trauma.¹

The first case was a 42 year old right handed policeman who fractured his right fifth metacarpal bone while trying to immobilise an aggressor. He was treated by external fixation and the wrist was immobilised in a neutral position in a plastic splint, from the two last fingers to above the wrist. Immediately after the removal of the splint, he noticed a right postural hand tremor which prevented him from holding his pistol and shooting his pistol with his arm stretched. Previously, he had noticed a slight bilateral hand tremor, but this did not interfere with his daily life. His mother and sister both had bilateral hand tremor. On examination, he had a predominantly unilateral high amplitude right hand tremor which appeared when his arm was stretched in front of him. No tremor was found at rest. Slight tremor was observed during writing. He had a painful scar over the fifth metacarpal bone. The rest of the examination was perfectly normal. A 7 Hz alternating tremor was recorded in the extensor and flexor carpi ulnaris. EMG was normal in those muscles. Conduction velocities in the right arm showed a slight compression of the ulnar nerve at the elbow. A two year follow up showed no improvement nor any spread to the other arm. There was no improvement with propranolol.

The second case was a 34 year old woman who had a whiplash injury of the neck. She was seen a few days later, complaining of constant headaches, pain in the neck, nausea and vertigo. On examination, the only abnormalities were a painful neck and a high amplitude postural right arm tremor, maximal on pronation of the forearm, and which stopped nearly completely on supination. Her past history was irrelevant. Radiographs of the cervical spine and right shoulder were normal as well as cervical and cerebral CT scans. EEG was normal. EMG in extensor and flexor muscles of the digits was normal and showed a 6 Hz alternating pattern. Auditory evoked potentials and right and left median nerve somatosensory evoked potentials with Erb, C7, C2, parietal and frontal recordings were normal. A one year follow up showed no change nor spread to the other arm. The other symptoms disappeared.

These are two additional cases of unilateral essential tremor induced by peripheral trauma. The first case had a slight

pre-existing familial essential tremor, which might have been enhanced by the peripheral unilateral trauma. In the second case, the presence of headaches, nausea and vertigo, might have suggested a central origin. But the normality of the cerebral CT scan, EEG, BAEP and somatosensory cortical responses, as well as the cessation of the tremor on supination of the forearm, might be more in favour of an abnormal peripheral spinal loop.

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Notice

The Second International Conference on Alzheimer's Disease and Related Disorders. July 15-20, 1990. This will be held in Toronto, Canada. Information may be obtained from Dr Al Snider, Conference Organiser, Institute for Basic Research, 1050 Forest Hill Road, Staten Island, New York 10314, USA.