総説

神経障害性疼痛に対する抑肝散の効果 —臨床症例と動物実験結果

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要旨：抑肝散の作用機序として脊髄下行性抑制系の賦活作用や電気的短絡回路の形成抑制などが示されているため，神経障害性疼痛への抑肝散の効果を検討した．臨床症例では，慢性疼痛（神経障害性疼痛を含む）症例121人の60%に効果が認められた．また，動物実験では，絞扼性神経損傷ラットモデルを用いて抑肝散の抗アロディニア効果を検討した．機械的アロディニアと冷的アロディニアとも投与後1～3時間にかけて蒸留水投与群に対して有意に抑制された．一方，アミトリプチリンでは有意な抗アロディニア作用は見られなかった．抑肝散の神経障害性疼痛に対する作用機転は現時点で推測の域を出ないが，臨床症例では難治性の神経障害性疼痛に対する効果が認められ，ラットでは抗アロディニア作用が認められた．副作用の比較的少ない漢方薬である抑肝散は，神経障害性疼痛治療の選択肢に新たに加えられるべきであると考えられた．

索引用語：抑肝散，神経障害性疼痛，アロディニア，CCIモデル

PAIN AND KAMPO MEDICINE Vol.20 (2010)

Efficacy of yokukansan against neuropathic pain: clinical reports and the animal study

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Abstract: Repeated administration of yokukansan decreases expression of 5-hydroxytryptamine (5-HT) 2A receptors in the prefrontal cortex in mice, and yokukansan also protects destruction of myelin sheaths in rats with thiamine deficient-induced encephalopathy. Mechanism of effectiveness of yokukansan on neuropathic pain has not been established; however, efficacy of yokukansan on neuropathic pains was clinically shown in the rate of 60% of the 121 patients. Allodynic effect of yokukansan was evaluated using rats with painful neuropathy induced by chronic constriction injury (CCI). Oral administration of 1.0 g/kg yokukansan significantly increased the withdrawal threshold in the von Frey hair test as an investigation of mechanical allodynia. Yokukansan (0.3, 1.0 g/kg, p.o.) also significantly inhibited cold allodynia induced by acetone. Meanwhile, oral administration of 20 or 60 mg/kg amitriptyline, a tricyclic antidepressant, demonstrated moderate antiallodynic effects in the mechanical and cold tests, but not significantly. It is, as far as we know, the first report that yokukansan was effect on neuropathic pain. Yokukansan without serious adverse reactions may be a possible medicine for treatment of neuropathic pain in future.

Key words: yokukansan, neuropathic pain, allodynia, CCI model

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