척수재활 발표일시 및 장소: 10 월 18 일(금) 15:15-15:25 Room C(5F)

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Demographic and clinical characteristics of spinal cord injury patients with neuropathic pain

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Introduction

Many spinal cord injury patients suffer from neuropathic pain, resulting in poor quality of life. However, there is a lack of epidemiological investigation about the spinal cord injury(SCI) patients with neuropathic pain compared to other general chronic pain population. This study aims to investigate the prevalence of neuropathic pain and study the demographic characteristics and medical conditions of neuropathic pain in SCI patients.

Method

The medical records of patients with spinal cord injury who were hospitalized in our hospital between 1 January 2016 and 31 December 2017 were reviewed retrospectively. We used the International Spinal Cord Injury Pain(ISCIP) classification to investigate the characteristics of neuropathic pain in SCI patients. We analyzed the prevalence of neuropathic pain and the distribution of gender, age, disease duration, etiologies, neurological level of injury, type of injury(complete/incomplete lesions) and the level of pain.

Result

288 out of a total 459(62.7%) SCI patients had neuropathic pain, 269(93.4%) with below level pain and 17(5.8%) with at level pain. In the group of patients with neuropathic pain, the average patient age was 53.25±16.57 and the number of males was 202(70.1%). There were 149(51.7%) chronic SCI patients. The neurological level of injury was cervical in 146(50.7%) patients, thoracic in 87(30.2%) patients, and lumbar in 54(18.8%) patients. Of the total SCI patients, 212 out of 338 patients with incomplete lesions and 72 out of 121 patients with complete lesions had neuropathic pain. 170 patients had non-traumatic spinal cord lesions and 90 of them had neuropathic pain.

Conclusion

With a prevalence of 62.7 percent, about two-thirds of SCI patients were actually suffering from neuropathic pain. Traumatic SCI patients had significantly higher prevalence of neuropathic pain than non-traumatic SCI patients. There were no significant correlations between prevalence of neuropathic pain and the type of injury.

Table 1. Demographic and clinical characteristics of SCI patients with neuropathic pain

| Variable | Value |
|------------------------------|------------|
| Age | |
| 20-29 | 20(6.9%) |
| 30-39 | 41(14.2%) |
| 40-49 | 47(16.3%) |
| 50-59 | 69(24.0%) |
| 60-69 | 64(22.2%) |
| ≥70 | 47(16.3%) |
| Sex | |
| Male | 202(70.1%) |
| Female | 86(29.9%) |
| Onset | |
| Acute (<6months) | 139(48.3%) |
| Chronic(≥6months) | 149(51.7%) |
| Type of injury | |
| Complete | 72(25%) |
| Incomplete | 212(75%) |
| Neurological level of injury | |
| Cervical | 146(50.7%) |
| Thoracic | 87(30.2%) |
| Lumbar | 54(18.8%) |
| Sacral | 1(0.03%) |
| Level of pain | |
| At level | 17(5.9%) |
| Below level | 269(93.4%) |
| Other | 7(2.4%) |