Vol.3 No.4

The Application of Combined Quality of Control Circle for Acute Spinal Cord Injury

Mei Liu¹, Hong-xia Zhu², Jie Zhang¹, Chang-yuan Yang¹, Ling-yi Zhou¹, Dan Pu^{1,3}* and Lun-li Xie¹

- 1.Department of Minimally Invasive Orthopaedics, Department of Rehabilitation Medicine Center, The First People's Hospital of Huaihua, Hunan Huaihua, China
- 2. Department of Trauma Orthopaedics, Department of Rehabilitation Medicine Center, The First People&ersquo;s Hospital of Huaihua, Hunan Huaihua, China
- 3.ResearchCenter of Transational Medicine, Jishou University School of Medicine, Hunan Jishou, China

Introduction

Metastatic vertebral tumors are the most common types of bone metastases in the vertebral vertebrae. And a new therapeutic method has been used as a strategy to relive the pain and maintain the stability of the spine. However, there are many differences for these special patients who received a percutaneous vertebroplasty combined with interstitial implantation of 125I seeds compared to the patient accepting routine surgery. In particular, nursing strategies for patients who accept interstitial implantation of 125I seeds. Indeed, palliative care and palliative care are used to help the patient adapt to the situation of survival with a tumor. So this case report aims to share nursing experiences of avoiding injury from radioactive particles to the nurse

Case History

We presented a 49-year-old man who was diagnosed with a fourth thoracic vertebral body fracture caused by metastases from hepatocellular carcinoma. Percutaneous vertebroplasty plus interstitial implantation of 125I seeds were used to relieve back pain and rebuild the stability of the spine. After minimally invasive surgery, back pain is relieved in 3 postoperative days. However, the recurrence of back pain, progressive weakness of the lower limbs and loss of bladder control became the main complaints after 3 postoperative days. The majority of the symptoms included back pain and hypoaesthesia under the xiphoid process. The abdominal reflex, crissum and cremacteric reflex, and knee and ankle reflex could not be induced. No pathological reflection of the Babinski sign was induced. The major muscular force of the two lower limbs was 3 grades and gradually decreased during the postoperative period. Patient died 5 months after surgery due to multiple organ failure.

Discussion

Vertebral metastases generally cause a pathological fracture of the vertebral body, leading to intense pain and even sensory and motor disorders of the limbs [4]. In fact, these terminally ill patients require palliative, palliative and spiritual care [5]. And some publications have found that effective hospice and hospice and nursing strategies can extend lifespan, relieve pain, and provide a good quality of life [5,6]. In our case, teamwork includes routine professional care, palliative or palliative care and rehabilitation nursing care, as well as effective radiological

protection that improves the satisfaction of the patient and their loved ones.

Palliative care as an effective therapeutic method can improve the quality of life of terminally ill patients. For patients with metastatic spinal tumors, the palliative care associated with 125I can relieve back pain and restore the stability of the spine [7]. In addition, this method can help the patient to return to activities of daily living (ADL) [8]. This reported patient developed radiation induced myelopathy and developed fears and depressed emotions. Our team of nurses executed the hospice and spiritual care strategies. The results showed that the cooperative team includes the patient and their family number, the nurse, the rehabilitation therapist and the doctor can acquire greater therapeutic effectiveness, which has been proven by previous researchers [9]. In addition, rehabilitation nursing strategies have also been shown to be important. What is remarkable is that we insist on the radiation protection of medical personnel and the family of numbers [10]. The method of this prevention must keep a safety distance of at least more than 1 cm or wear protective clothing for the operating person.

Conclusion

Palliative and hospice care maybe the comprehensive nursing strategies for patient with the metastatic spinal tumors. These special nursing methods can relieve the pain resulting from tumor tissue or vertebrae body fracture even if they are in end-stage life. Besides, amount of work need to be done by researchers in the future like the systematic palliative and hospice work team and the comprehensive and scientific nursing strategies, especially, the consciousness and concept of palliative and hospice care should be installed in the future. Our report has some limitation such as the lack of experience of these nursing and lower evidence of level.

The nursing strategies

The nursing strategy includes routine professional care, palliative or hospice care, rehabilitation nursing, and radiation protection (Table 1). Indeed, the strategies emphasize the teamwork and cooperation without any separation.

Conflict of Interest and Ethical Approval

No potential conflict of interest relevant to this article was report. The informed consent was provided by patient and ethical approval was warranted by the First People's Hospital of Huaihua.