

What can we do for Metastatic Spinal Tumors after Accepting the Percutaneous Vertebroplasty Combined with Interstitial Implantation of 125I Seeds: Palliative and Hospice Care

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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 relieve 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 cremasteric reflex, and knee and ankle reflex could not be induced. No pathological reflexion 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. This patient died 5 months after surgery due to multiple organ failure.

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.

Routine professional care needs nurse to complete the professional therapeutic tasks such as nutrition support therapy, drug distribution, pain management, and vital sign monitoring. Besides, regularly change the site of body and perineum swabbing are the importance of similarity in order to preventing

to appear the pressure sore, deep venous thrombosis, and urinary infection. Emphasizing

pain management, especially, to acquire the satisfying effectiveness of analgesia or ease pain are the part of clinical work, which are used to performing enhancement of the quality of life of end-stage patient. Notably, these comprehensive methods decrease the complication of end-stage patient in term of careful observation and effective teamwork. In fact, the effective co-operations between the medical personnel and the family number of patient or patient can improve the effectiveness of treatment.

Palliative care or palliative care as an important part of nursing work to which sufficient attention is paid. Palliative care can gain the best efficacy from vertebral metastases in terms of minimally invasive surgery and other treatments, which are considered reasonable therapeutic methods for the terminally ill patient. However, palliative care has shown how to manage emotions and how to guide the patient at the end of life to relieve anxiety and accept death at ease. In fact, spiritual care is an essential component of palliative care to patients without the possibility of regaining health through therapy in the terminal phase due to the promotion of well-being, pain relief and the spiritual dimension. Rehabilitation nursing strategies are also used to relieve pain and rebuild the function of the residual limb, which can reduce the incidence of deep vein thrombosis in the lower limbs. In addition, rehabilitation nursing care is considered part of psychological nursing care. Certainly, this teamwork is made up of a physiotherapist, a psychologist, a nurse and a clinician.

It is very important to avoid radioactive injuries for medical personnel and family numbers. Radiation protection includes isolating other patients and using a leaded rubber suit for medical personnel, in particular, in order to maintain a safe distance between the patient and the population.

Discussion

Vertebral metastases usually cause a pathological fracture of the body of the vertebrae, causing severe pain or even sensory and motor disturbances of the limbs. In fact, these terminally ill patients need palliative, palliative and spiritual care. 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. 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, palliative care combined with ^{125}I can relieve back pain and restore the stability of the spine. In addition, this method can help the patient to resume activities of daily living (ADL). 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 a patient and their family member, a nurse, a rehabilitation therapist and a doctor can acquire more therapeutic efficacy, which has been proven by previous researchers. In addition, rehabilitation nursing strategies have also been shown to be important. What is remarkable is that we are focusing on radiation protection for medical personnel and the patient's family. 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.