

Epidural Analgesia Application in Pressure Ulcer for A Bed Bound Patient

Yatak Yarasına Bağlı Gelişen Ülserde Epidural Analjezi Uygulamaları

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ABSTRACT

Development of pressure ulcers in bed-bound patients and complications associated with these wounds are common problem across all health care settings. The most important aspect is that it is always better to prevent the ulcers in the elderly patients, than to cure them. Because if occurs once, it is very difficult to cure it. There may be need for adjunct applications such as ambulatory epidural analgesia as in our case.

Keywords: Pressure ulcer, epidural analgesia.

INTRODUCTION

Development of pressure ulcers in bed-bound patients and complications associated with these wounds are common problem across all health care settings. Pressure ulcers are more common in the weak and immobile elderly patients. The main risk factors are: inactivity, immobility, malnutrition etc (1). It is commonly accepted that decubitus ulcers may develop as a result of immobility during continuous pressure that results in ischemia. The key issue of solving the problems of decubitus ulcer is the prevention of immobility. Significant treatment regimen such as antibiotic, analgesic, debridement of ulcers in combination with early recognition, regular monitoring and effective analgesia help rapid healing and minimizes morbidity, mortality, and costs. But analgesic medications are often insufficient for the persistent pain associated with decubitus ulcer.

CASE

We describe herein a case, 73 year-old man with stage II pressure ulcer in sacral area in tenth day of postoperative supportive care associated with cardiac bypass of three coronary vessels and mitral valve prolapsus surgery. He had a history of cardiac arrest in third day after the surgery and he was returned to life with a successfully resuscitation without any complication. He had to be bed bound for sometimes since inotropic requirement associated with cardiac failure.

ÖZET

Yatağa bağlı hastalarda gelişen yaralar ve komplikasyonları yaygın bir sorundur. En önemlisi özellikle yaşlı hastalarda yara gelişimini önlemeye yönelik tedavidir. Ama eğer bir kez olursa tedavisi çok zordur. Bazı yardımcı uygulamalara ihtiyaç vardır. Biz bu vakada Epidural Analjezi uyguladık.

Anahtar kelimeler: Yatağa bağlı hastada gelişen yara, epidural analjezi.

This wound due to pressure ulcer of sacral area limited his ambulation totally and debridement of the ulcer was impossible because of persistent pain. His ulcer failed to respond to more traditional therapies like physical therapy; and palliative care. Oral analgesics tried to relieve his persistent pain were unsuccessful. To improve his functional limitation by pain relief, an epidural infusion of Levobupivacaine 5%, rate of 1mg/h, with an elastomeric easy pump was started in the Intensive Care Unit (ICU). The patient had progressed very well. Following few hours after epidural drug administration, he had denied any pain at rest or with ambulation. Soon after that he had returned to simple daily activities such as eating, walking, sitting, lying etc. The wound debridement was then conducted easily without any pain. At the post-operative 27th day, the ulcer was almost disappeared.

DISCUSSION

Noxious substances which are released in response to pressure ulcer tissue initiate the nociceptive transmission. Spinal reflex responses such as acute vasoconstriction, muscle spasms, and increased sensitization of nociceptors etc are then activated when noxious information enters to the spinal cord through the dorsal horn. These responses have an inhibitory effect on healing the wound because of decreasing blood circulation around the wound. Epidural analgesia prevents these spinal reflex

responses. In addition, epidural analgesia offers excellent analgesia, less sedation, earlier ambulation, decreased incidence of pulmonary complications, decreased incidence of venous thrombosis, earlier return of bowel function, decreased stress response. These results in very beneficial effects on healing the wound. Earlier ambulation is one of the most important factors that prevents to pressure ulcer development. The most accepted way to prevent the pressure and friction is to eliminate them as much as possible. The simplest method for eliminating pressure is frequently turning the patient in the bed (2). This should be done regularly, every two to three hours during the day (2). Elderly patients are commonly considered to have an impaired ability to heal their wounds. This impairment can further be exacerbated by their decreased capability of handling the complications associated with these pressure ulcers. Ambulatory epidural analgesia is a popular choice for pain relief because ambulation increases patient's comfort, avoids ulcer compression. That's way helps the healing of the wounds. Effective pain relief is the most important part of these medications, especially when given through a central way like epidura (3). This provides improved analgesia, and allows the patient to participate in daily activities such as sitting, walking etc. Epidural analgesia can also take part in the treatment process by causing increase in the blood circulation around the wound due to its vasodilatatory effect, which will in turn leads to improvement in the healing of the wound (4, 5).

The most important conclusion is that it is always better to prevent the ulcers in the elderly patients,

than to cure them. But if it occurs once, it is very difficult to cure. There is need adjunct applications such as ambulatory epidural analgesia as in our case.

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