Case Report / Olgu Sunusu

Regional anesthesia in a patient presenting with varicella
Varicella Olgusunda Rejyonel Anestezi Uygulaması

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ÖZET

Varisella zoster virus(VZV), herpes virus ailesinden bir DNA virüsüdür. Vesiküler döküntüye ateş ve halsizliğin eşlik ettiği ve kendi kendini sınırlayan bir hastalıktır.

22 yaşında erkek hasta akut karın semptomlarıyla acil servise başvurmuş.10 gündür döküntülü lezyonları ve ateşi olan hastanın suçiçeği teşhisi aldığı öğrenildi. Preoperatif fizik muayenemizde; nabız:120 atım / dk, TA:90/55 mmHg, Mallampati skoru 4 olan hastanın boyun eklemi ekstansiyona gelememekteydi ve bu nedenle rejyonel anestezi uygulanmasına karar verildi. L 4-5 aralığında döküntülerin olmadığı küçük çaplı bir alan tespit edilerek, 26 G spinal iğne ile 15 mg heavy marcain bu aralıktan subaraknoid mesafeye enjekte edildi.

Sensoriel blok seviyesi T8'e ulaştığında cerrahi başlatıldı. İntraoperatif vital bulguları stabil seyreden hasta postoperatif sorunsuz olarak servise gönderildi.

ANAHTAR KELİMELER: Suçiçeği, spinal anestezi, heavy marcain, akut batın, lezyon

ABSTRACT

Varicella zoster virus (VZV) is a DNA virus of herpes family. It is characterized by vesicular rash, fever and fatigue and it is a self-limiting disease. 22 years old male patient referred to emergency room with acute abdominal symptoms.

We observed that the patient presenting with exanthema and fever for 10 days was diagnosed with varicella. In the preoperative examination, pulse was detected: 120 beats/minutes, blood pressure: 90/55 mmHg, Mallampathy score (Type 4) was high and neck joint could not manage extension, for this, regional anesthesia was decided to be performed.

Detecting a small sized area without rashes between L4-5, 15 mg hyperbaric bupivacaine was injected to subarachnoid distance with 26 G spinal needle.

When sensorial block grade was T8 incision was initiated. Intra operative vital results were stabile and the patient was referred to service without any per operative problem.

KEYWORDS: Varicella, spinal anesthesia, hyperbaric bupivacaine, acute abdomen, lesion

INTRODUCTION

Varicella zoster virus (VZV) is a DNA virus of herpes virus family. It usually occurs in pediatric ages, and it is extremely contagious, benignant and self limited, moderate disease. The virus penetrates into the organism via respiratory tract and locates in skin and occasionally in lung. It latently locates in dorsal root ganglion, as well and may sometimes become reactive and localized cutaneous eruption develops and it is known as herpes zoster. Despite the fact that regional anesthesia is not recommended for those patients with skin lesion, regional anesthesia may be applied to those for whom general anesthesia is not plausible(1).

Case

A 22 year old male patient referred to emergency room due to acute abdominal symptoms. The patient who was decided to be operated by a general surgeon due to acute abdominal symptoms had 38°C fever, and presented with diffused croup and macula papillary rashes and productive cough, as well. The patient was presenting with exanthema and fever for 10 days was diagnosed with varicella. In the preoperative examination, pulse was detected: 120 beats/minutes, blood pressure: 90/55 mmHg, Mallampathy score (Type 4) was high and neck joint could not manage extension, in addition, bilateral diffused rattles and tachycardia were detected. Detected particularly in lower back and dorsal section rashes were diffused in total body. In the inspection of history, we observed that the patient underwent leflunomid 10 mg/day treatment for the last 5 years due to rheumatoid arthritis. Due to complex intubation criteria, those detected in physical examination and because of fullness of the patient, regional anesthesia was planned.

Following the laying of patient on operation table, he was monitorized and preoperative antipyretic was administrated and fever was detected to be 36.7°C. Detecting a small sized area without rashes between L4-5, 15 mg hyperbaric bupivacaine was injected to subarachnoid distance with 26 G spinal needle. When sensorial block grade was T8 incision was initiated. Intra operative vital results were stabile and the patient was referred to service without any per operative problem. We learned that his operation and infection are recovered without any complications in two months.

Figure 1. The area with rashes

Discussion

Varicella is an acute and highly contagious disease caused by varicella zoster. Vesicular rashes in the sufferers are accompanied with fever and fatigue and varicella is self limiting disease. Serious complications such as aseptic meningitis, encephalitis, transverse myelitis and Reye's syndrome appear in immunosuppressant patients. Secondary to skin lesions, bacterial infection may also develop. Other complications include myocarditis, corneal lesions, nephritis, arthritis, hemorrhage disorder, and acute glomerulonephritis.

The best anesthesia technique in varicella is controversial. Regional anesthesia may be used in viral infections such as varicella which is characterized by diffused rashes (1). Virus may involve in central nervous system via spinal or epidural block thereby leading to memengitis or encephalitis. Camann and Taoumala has reported that regional anesthesia should be applied at least two weeks later following the onset of varicella infection (2). In addition, in the patients with high risk pneumonia, regional anesthesia is primarily

preferred in case of acute varicella (3). In HIV infections spinal anesthesia was safely used (4). Brown et al reported that in the caesarean cases with varicella infection they performed spinal anesthesia and that pensile point spinal needle application reduced the transmission of virus to the central nervous system (5).

We preferred regional anesthesia rather than general anesthesia due to the fact that our patient had Mallampathy score (Type 4), and that head extension was limited and the patient was full. 15 mg hyperbaric bupivacaine was administrated to the patient in spinal anesthesia so that the patient following operation due to acute abdominal symptoms could not be affected by peritoneal imaging. Operation was initiated following the intervention to thoracic 8 grade 6 minutes later and no complications were detected.

Despite the fact that regional anesthesia is not recommended in the patients with skin lesion, regional anesthesia may sometimes be required if general anesthesia is not plausible. Although epidural anesthesia on sites without lesions is determined to be more advantageous in such cases, spinal anesthesia is not disregarded, as well. We have preferred spinal approach in our patient; nevertheless, we consider that epidural approaches be more accurate.

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