

Conversion reaction mimicking a high spinal anesthesia

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To the Editor:

High spinal block is a known complication of spinal anesthesia [1]. Here we describe our experience in a clinical situation that initially prompted us to suspect a high spinal block but which was likely caused by a hysterical episode.

A 40-year-old woman (ASA physical status I; 160 cm in height, weight 58 kg) with uterovaginal prolapse presented for elective vaginal hysterectomy. Although she was apprehensive about her surgery at preoperative clinic, she reassured and consented to receive spinal anesthesia. The night before the surgery, she was given 0.25 mg oral alprazolam. Her baseline vital parameters were stable. In the operating room, an intravenous access was established, and 1 mg midazolam was administered.

A 25-G Quinke spinal needle with bevel facing upward was inserted in left lateral position at the L3–L4 level. Hyperbaric bupivacaine 0.5% 12.5 mg (2.5 ml) was injected intrathecally over a period of 15 s. The onset of the block occurred within a minute. She was placed in lithotomy position, and the surgery was started 20 min later with a sensory level of T8. Oxygen was administered at 3 l/min using a face mask. Verbal contact was made with her every few minutes. At 30 min after the start of surgery she suddenly became unresponsive to verbal commands, was not

responding to skin pinch on arm, and her respiration was found to be very jerky and shallow. There was a transient fall in oxygen saturation to 92%. The anesthesiologist requested the surgeons to stop the surgery and provided 100% oxygen using a Bain's circuit. Her jaw tone was maintained; her heart rate was 75 beats/min, and blood pressure was 126/70 mmHg. Her blood sugar was found to be 6.5 mmol/l. After 3 min she became responsive to verbal commands, her respiration became normal, and oxygen saturation improved to 99%. Her vital signs remained stable and she did not complain of anything. She perceived a sensory loss up to her shoulder tip. We checked for sensations over her face, and she mentioned sensory loss even on her face. Her pupils were normal in size and reacted normally to light. She was reassured, and after 2 min the level of block was rechecked. The level was up to the T8 dermatome level. Her husband was interviewed, and no history of any psychiatric illness was noted. The surgery was allowed to proceed and was completed uneventfully during the next 50 min. Postoperative evaluation was performed by a psychiatrist and a neurologist. Her electroencephalogram and a computed tomography (CT) scan of the brain were found to be normal. The episode was diagnosed to have been caused by hysteria. The subsequent postoperative period was uneventful. The spinal anesthesia lasted for 3 h, and there was no focal deficit.

Conversion reaction is a condition characterized by sensory and motor derangement along with emotional disturbance. It is a psychological disorder in which severe physical symptoms such as blindness or paralysis appear with no apparent physical cause [2]. Conversion reactions have previously been reported after spinal anesthesia [3], but ours is perhaps the first case in which some of the features mimicked high spinal block. Clinical features in our patient initially resembled high spinal block, but her vital signs were stable. Her normal blood sugar level ruled

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out deranged blood glucose. Normal pupillary reaction, absence of any focal deficit, and normal CT scan ruled out a cerebrovascular event. It cannot be attributed to midazolam, which had been given almost 40 min earlier. Delayed high level of block and hemodynamic stability are consistent with subdural block [4], but our patient presented features typical of hysteria, and the actual sensory level was up to T8. We therefore highlight that preoperative psychological stress combined with surgical stress can precipitate conversion reaction (hysteria), which can mimic some of the clinical features of high spinal block.

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