

Pilot Program to Introduce Spinal Labor Analgesia in a West African Hospital

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Introduction: Women in Africa consistently rate childbirth pain as severe, similar to women in other countries, however, African women have few options for labor pain relief (1-3). Several West African studies found that many women would desire to have labor analgesia if given the opportunity (1-3). The purpose of this observational study was to determine the efficacy and acceptance of regional labor analgesia in a Ghanaian tertiary obstetric center.

Methods: Institutional permission was granted for Kybele to develop a labor analgesia protocol. An international team of experts assessed the local availability of supplies and designed a spinal labor analgesia protocol and patient data record. Epidural analgesia was not feasible in this setting due to safety concerns and equipment limitations. Nurse anesthetists were trained to administer and assess spinal labor analgesia using pencil point spinal needles and bupivacaine (2.5 mg) with or without fentanyl or pethidine. Pain was measured on a 10-point verbal pain scale. Adherence to protocol and complications were assessed at intervals.

Results: Forty-eight women received spinal labor analgesia; of these, 6 patients received a second dose after the first dose wore off. The mean \pm SD verbal pain scores were 8.8 ± 1.4 and 0.2 ± 0.7 before and 10 min after analgesia, respectively. Overall, motor block was minimal and patients ambulated to an adjacent room for delivery, however, assistance was required for some. Ephedrine (10 mg) was available but not needed. One patient had a parathesia during spinal administration. There were no post-partum complications and patients were highly satisfied with the degree of analgesia. Efforts were hampered when prolonged anesthesia staff shortages diverted the trained nurse anesthetists to the operating room.

Conclusion: There was a high acceptance of spinal labor analgesia among Ghanaian parturients without complications. Regional labor analgesia can be provided in a low resource setting, however, care must be taken during ambulation and manpower shortages are a significant limitation.

References: ¹J Obstet Gynaecol 2007;27(6):585-88. ²Med Trop 2007;67(2):159-62. ³J Obstet Gynaecol 2006;26(4):332-34.

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