

Large Review of Anesthesia & Delivery Methods For Chiari Women

Chiari and pregnancy has been, and continues to be, one of the most viewed topics in the Conquer Chiari On-Line Library. Despite this, the number of journal papers on the subject remains quite limited. In fact, the last significant contribution was four years ago and involved a review of only thirty-five pregnancies.

Now, a group from the UK has published a systematic review of the literature combined with their own hospital system records that identified 137 pregnancies involving Chiari women. The purpose of their review was to look at the methods of anesthesia (if any), analgesia (pain control), and any new or worsening of Chiari related symptoms. They found 103 cases reported in the literature from any country, and 34 cases in their own hospital system.

Sixty-one percent of the births were vaginal (84), with the rest by Caesarean section (52, one was not reported). For the Caesarean births, 26 women were given general anesthesia, 18 spinal blocks, 3 epidurals, and the rest a combination. For the vaginal births, 29 women were given epidurals, 24 were given nitrous oxide (aka laughing gas), 3 were given morphine, and for a large number nothing was reported.

In total, three women were reported as having experienced new symptoms, and three more were reported as having experienced a worsening of existing symptoms. Interestingly, half had had vaginal births and half Caesarean. However, three of the cases were a result of an accidental dural puncture which triggered headaches in two of them and multiple symptoms in the third. Symptoms in other cases which got worse after delivery included upper extremity numbness/tingling and dizziness. For half of these women, the symptoms resolved completely, for two of them they improved, and the long-term result for the last one was not reported. Only one of the women required decompression surgery in the near term after delivery.

The authors stress that while they didn't find any catastrophic type reports, the quality of what is reported is low and inconsistent. Further, there could be a bias towards clinicians reporting successful cases versus ones where their patients experienced severe declines. Despite this, the authors believe that for pregnant Chiari women, an individualized, patient-centered approach can safely be pursued in determining the best delivery, anesthesia, and pain control options.

Sources: Anaesthetic management of obstetric patients with Chiari type I malformation: a retrospective case series and literature review. Simpson A, Ferguson C. Int J Obstet Anesth. 2024 Jul 17;60:104232. doi: 10.1016/j.ijoa.2024.104232. Online ahead of print. PMID: 39116672

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