ANAESTHETIC MANAGEMENT OF AN OMPHALOPAGUS CONJOINED TWIN DELIVERY

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BACKGROUND:

The incidence of conjoined twins is 1 in 50.000 to 100.000 pregnancies or 1 in 650 to 900 monozygotic twin pregnancies. Omphalopagus conjoined twins (OCT) represent the 33% amongst the total. Antenatal care and delivery depends on the place and extent of union. Obstetric complications for both mother and babies are common.

CASE REPORT:

A 30-year-old (G2P1) was diagnosed with a conjoined twin pregnancy at 12 weeks of gestation by ultrasound scan (US). Later MRI revealed an OCT pregnancy. They shared the liver, and they could not tell whether they shared the colon or not. The first twin presented a TGA.

They planned an elective caesarean delivery at 35+4 weeks of gestation. They made a Pfannestiel type skin incision, and a transverse Kerr uterine incision.

After considering every factor, the anesthesia team decided that a combined spinal-epidural technique would be the best option. We had cross-matched prepared blood and a rapid iv infusor, in case of massive obstetric hemorrhage. We made sure everything was ready in case general anesthesia was needed.

The mother was premedicated with ranitidine and metoclopramide, she had two large iv lines inserted. A CSE was sited at L3-L4 space in the sitting position and 0.5% hyperbaric bupivacaine 9mg + Fentanyl 20mcg was administered intrathecally. We repositioned the patient in a supine reverse Trendelenburg with left uterine displacement, and administered 0.75% Ropivacaine 6 ml through the epidural catheter, achieving a sensory block up to T4.

The caesarean delivery proved successful without any of the possible events taking place. The uterus contraction was good after the administration of 100 mcg of Carbetocin. The babies had Apgar scores of 5/7 and 5/8 and a ph of 7.35, one of them required mechanical ventilation.

Postoperatively, pain was managed with morphine through epidural catheter and intravenous dexketoprofen and paracetamol.

Separation of the babies took place 48 hours after delivery. The first twin underwent a cardiac surgery after separation but died 3 months later. The second twin, however was discharged home.

DISCUSSION

We report the successful delivery of OCT. We are absolutely certain that the multidisciplinary antenatal approach contributed to the successful outcome in the case.

The team included doctors and nurses from obstetrics, anaesthesia, neonatology, paediatric surgery, paediatric cardiac surgery and radiology.

We chose the CSE for several reasons, the mother wanted to be awake, in order to see her babies before they were taken to ICU, moreover if the delivery turned out to be difficult, the epidural catheter allows to enhance the sensory block.

We were prepared for a general anaesthesia in case of massive hemorrhage and had all the necessary drugs for atony and hemorrhage ready.

Images 1 and 2 show MRI T2 weighted images, in which we see two OCT sharing the liver. However, attending to the images we can not confirm whether they share colon or not.

References:

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2. Baruah S, Downey G P. The value of multidisciplinary working: a report on the management of conjoined twins. J Obstet Gynaecol 2003; 23: 311-2.