Cardiorespiratory arrest during obstetric anaesthesia

A 10-year analysis in Vall d'Hebron Hospital, Barcelona

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BACKGROUND AND GOAL OF STUDY

Cardiorespiratory arrest in the obstetric population is a rare but catastrophic event. Obstetric care teams have a low exposition to this kind of critical situations. Thus, it's necessary to maintain a constant training, to study its etiology and to know the appropriate treatment in this group of patients.

MATERIAL AND METHODS

Retrospective study. Anaesthetic procedures between 2.005 and 2.014 were analyzed. The main objective was to determine the incidence of cardiac arrest during the anesthetic assistance in labor and caesarean sections. Secondary objectives were to determine: the survival tax, the functional prognosis after hospital discharge, according to the OPC (Outcome Performance Cerebral) scale of Pittsburg-Glasgow, the etiology and the kind of anaesthesia performed.

RESULTS AND DISCUSSION

36.672 anaesthetic procedures were analyzed. There were **4 cases of cardiac arrest**, all of them during caesarean section procedures. The initial anaesthetic technique was locoregional in the 50% of patients. We found an incidence of one case each 9.168 anesthetic procedures, 1/2.567 caesarean sections. **Survival tax** after hospital discharge was **75%**. Functional prognosis of the survivors was good in all patients (OPC 1, 2 patients. OPC 2, 1 patient). Only one case was directly related to anaesthetic procedure. In all cases a live fetus was obtained.

CAUSES OF CARDIAC ARREST RELATED TO OBSTETRIC ANAESTHESIA: 1/9000

- **Airway management 25%**
- **Amniotic fluid embolism 25%**
- **Cardiopathy and severe preeclampsia 25%**
- **Massive hemorrhage 25%**

CONCLUSION: Cardiac arrest is an infrequent event during obstetric anaesthesia, which requires an adequate coordination between specialties. In our study we found an incidence of 1/9.000 anesthetic procedures related to hemorrhage, cardiomyopathy and problems during the airway management.