

## **Macrosomic infants weighing $\geq$ 4500 g: risk factors and perinatal outcome**

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### **OBJECTIVE**

To describe maternal and perinatal outcome of macrosomic fetuses.

### **PATIENTS and METHODS**

Retrospective analysis of term singleton newborns birth weight  $\geq$  4500g between 2003 and 2012

Predictive variables:

maternal age, parity, gestational age at delivery, birth weight, fetal gender.

Maternal and perinatal complications were assessed

Study population: 21.372 neonates ;  $\geq$  4500g: 209 (incidence: 0.97%).

#### Maternal information (at birth):

Mean maternal age: 30.1 years old (SD 5.6). Body Mass Index  $>$  30: 8.6% (18/209)

Multiparous: 70,3%. Previous cesarean section: 20,1%

Gestational diabetes mellitus (GDM): 11%. Insuline requirement: 4.7% (10/23).

### **RESULTS**

#### Delivery information:

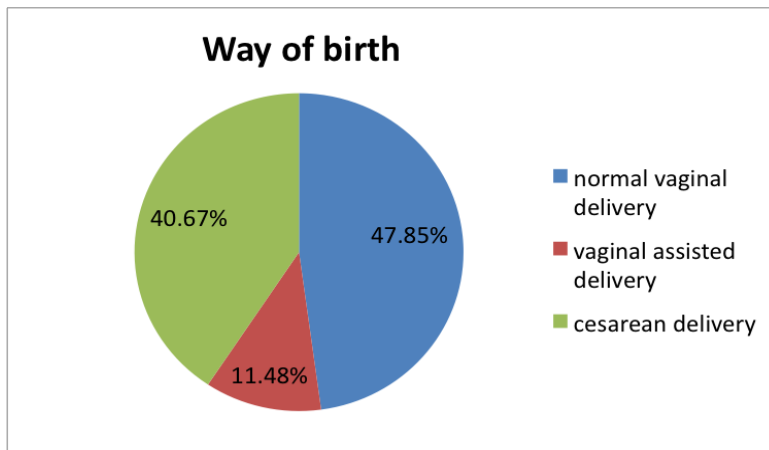
Median gestational age: 40<sup>6/7</sup> w (range 37–42<sup>4/7</sup>).

Deliveries over 41w: 44%

Eutocic deliveries: 100/209: 47,8% . Instrumental deliveries: 24/209: 19,3% of births

Cesarean deliveries: 85/209 (40'7%). Elective: 19 (22.3% of cesarean)

Relative risk for cesarean birth in case of macrosomy: 1,902 (CI 95%: 1,612-2,245).



Maternal complications:

Post-partum hemorrhage after vaginal delivery (requiring blood transfusion): 0.96% (2/124)

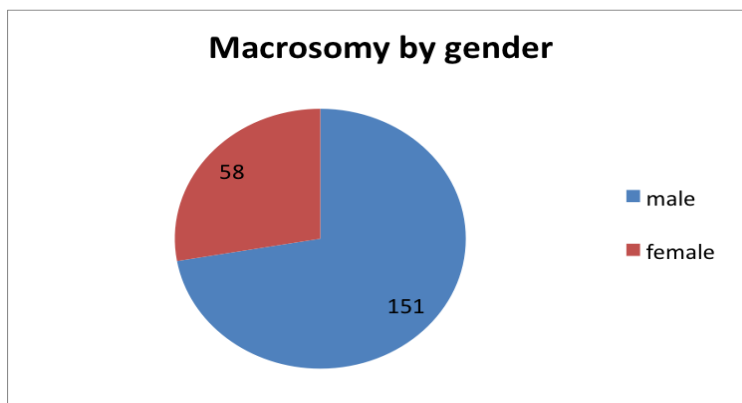
Third-degree laceration: 3.2% (4/124 of vaginal deliveries)

Newborn information (at birth):

Weight: 4650g (range 4500-5350 g).

Sex: 151 males (72,2%), 58 females (27,8%)

RR of macrosomy in males: 2,32 (CI 95%: 1.71-3.13).



Obstetrics Complications:

Shoulder dystocia: 6.4% (8/ 124 vaginal deliveries)

Clavicle fracture: 5/8.

Brachial plexus injury: 5/8.

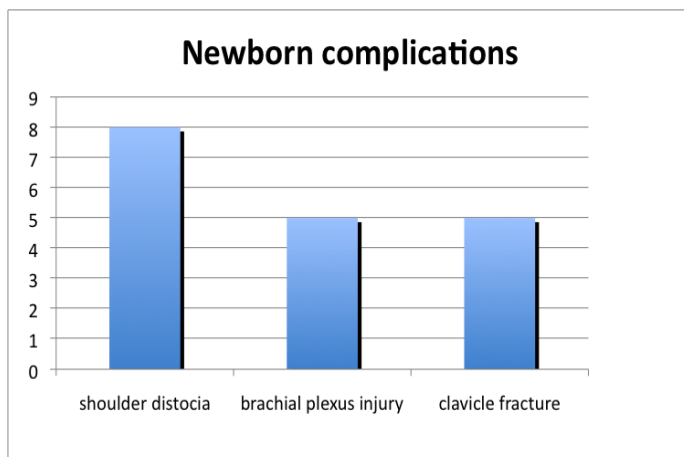
Both: 2/8.

Neonatal hypoglycemia (<24h): 46.4% (97/209)

Neonatal jaundice: 6.2% (13/209)

Neonatal intensive care admission: 1

Perinatal mortality: 0



## CONCLUSIONS

1. Macrosomy was associated with delivery beyond 41 weeks and male gender.
2. Vaginal delivery was associated with a significant risk of shoulder dystocia.
3. Neonatal hypoglycemia complicated almost 50% of such large infants.