LGA infant), prepregnancy obesity and preexisting diabetes mellitus (an almost twofold higher risk to give birth to a LGA infant), gestational diabetes mellitus, and multiparity.

**Conclusions:** The results of this study identified predictive factors for LGA births in the studied population. Data collected support the planning of population-based interventions aimed both at prevention of this morbidity.

### 1191

# ACCURACY OF SCALES USED TO WEIGH NEWBORN INFANTS

E.A. Kieran<sup>1</sup>, N. McGrath<sup>1</sup>, C.P. O'Donnell<sup>1,2,3</sup>

<sup>1</sup>Neonatology, National Maternity Hospital, Holles St, <sup>2</sup>Our Lady's Children's Hospital, Crumlin. The Children's Research Centre, <sup>3</sup>University College Dublin, Dublin, Ireland

**Background:** Newborn infants who receive medical care are repeatedly weighed in hospital. These weights are used to determine adequacy of fluid balance, feeding and growth; and to determine appropriate drug doses.

**Objective:** To determine the accuracy of the scales used to weigh newborns in our hospital.

**Design/Methods:** All scales used to weigh infants in our hospital were checked with 3 standard weights: 500g, 1000g and 3500g. All weights were placed on each scales on 3 occasions (i.e. total 9 measurements) by one of two investigators. The order in which the weights were placed on the scales and the investigator who placed the weights on the scales were chosen randomly.

Results: We studied 28 infant scales (seca, Gremany. Models 335, 835-2, 376, 727, 375). Eleven (39%) scales measured the weights correctly on all occasions. Seventeen (61%) scales gave inaccurate results on 80 occasions in total, mean (SD) of 52 (29) % of occasions each. When inaccurate, the scales most frequently underestimated the true weight [63/80 (79)%]. Inaccurate measurements occurred increasingly frequently with heavier weights [19/84 (23%) measurements with the 500g weight; 24/84 (29%) with the 1000g; 37/84 (44%) with the 3500g]. The errors ranged from an underestimate of 40g to an overestimate of 220g. The mean (SD) error in absolute weight was 27 (33) g and in proportion of weight was 2 (3) %.

**Conclusions:** Scales used to weigh newborns are frequently inaccurate. While the errors we found were relatively small we speculate that they may be greater in clinical practice.

#### 1192

# APGAR: CESAREAN SECTION AND VAGINAL DELIVERY

### S. Taavoni

Midwifery Countniung Education Office, Pain Research Group of ACECR, Iran University of Medical Sciences, Iran University of Medical Sciences, Tehran, Iran

One of the special problems in obstetric is extra ordinary increase of the Cesarean Section (C/S) rate.

**Aims:** To compare: A) APGAR score of C/S with V/D. B) Time of C/S with V/D.

**Materials & Methods:** This is a case-control study (retrospective), which compared 289 C/S case notes with 301 V/D. (Randomly selected from entire case notes of one of the non-educational hospitals of Iran University of Medical Sciences. The descriptive and inferential statistics (X2, T test, and mann-withny) were used.

**Results:** Average of first APGAR score in V/D group was 8.15 (SD= +\_ 1.6) and in C/S was 7.78 (SD= +\_0.9). Average of APGAR score after 5 minutes in V/D group was 9.34 (SD= +\_1.2) and in C/S was 8.86 (SD= +\_0.7). Rate of C/S Section at 10AM was 7.2%, at 3 PM was 7.2%, and during 12 MN till 5 AM was 6.5%. 7% of C/S did not have acceptable or clear reasons such as Tubectomy (8 cases) etc.

Conclusions: There was significant difference between minute one and minute five APGAR scores of the two groups. (P= 0.000) Therefore it is not acceptable that with C/S baby will have better APGAR score. There was correlation between time and type of delivery. (P=0.000) It might be due to convenience factors. This study indicates that some operations were not done for medical reasons, such as clients' demands because of fear from pain of V/D, therefore with respect to patient rights; obstetricians must offer more counseling about side effects of C/S.