Obstetric High BMI Audit

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Introduction: the prevalence of morbid obesity has been rising for many years and can increase the complexity of care required in the Obstetric population. Anaesthetic challenges include patient positioning, intravenous access and difficult central neuraxial blockade. Furthermore, NAP 4(1) demonstrated that patients with a BMI >35 are 4 x more likely to experience airway problems when under a General Anaesthetic. Obstetric patients are known to have a 10x higher rate of failed intubation when compared to the non-Obstetric population. Standard Anaesthetic advice to patients with a BMI is to have a labour epidural sited early in labour to help prevent as much as possible the need for a GA. Our aim was to provide a comprehensive audit of the care provided to all Obstetric patients with a BMI >40 who gave birth in our Obstetric unit.

Method: retrospective data was collected for a period of 13 months from August 2011-2012. Patients were identified from the labour ward birth logbook. Data included no. of deliveries, BMI, age, parity, induction of labour, gestation, mode of delivery, post-partum haemorrhage, anaesthetic review prior to labour, labour epidural, category 1 and GA caesarean section were recorded.

Results: 3617 deliveries occurred in the 13 month period and of these 124 women had a BMI >40 at booking(3.4%). However, no BMI data was recorded for 223 women. Parity -49(39.5%) women were primigravid and 75(60.5%) were parous.

Mode of Delivery	SVD	Forceps/kiwi on LW	Forceps/kiwi in Theatre	Elective LUSCS	Emergency LUSCS
No. of Deliveries	54 (43%)	5 (4%)	2 (2%)	35 (28%)	28 (23%)

Figure1 – Mode of Delivery

89 women were allowed to labour and of these 14(16%) received labour epidurals. This is below the historic rate of 25-30% labour epidurals at our unit. However, of the 41 primigravid women who laboured 13(32%) received a labour epidural. Data for attendance at an anaesthetic review was incomplete. Of the patient attendance data that we were able to confirm (53 of 124) the attendance rate was 34%. 4 patients (3%) suffered a PPH of 1000ml or greater. There were no category 1 LUSCS and no patient received a general anaesthetic.

Discussion: No patient received a GA or required a cat1 LUSCS, which suggests that women with a high BMI were treated with due care. The surprising labour epidural rate can be explained by a number of factors. Only 89 patients entered labour and of these there were only 41 primigravid women, relatively low numbers for data analysis. Unit practice for patient review indicates that only women with a BMI >45 should attend an anaesthetic review prior to labour. Therefore the absence of anaesthetic advice prior to labour may account partly for the lower than expected epidural rate.

Conclusion: we have BMI data for 94% of our patients and of these 3.4% had a BMI >40 at booking. The quality of care provided to these women appears to be good. However, more work is needed to look at labour epidurals in the morbidly obese population.