

Introduction

Obesity in pregnancy is defined as a Body Mass Index (BMI) >30 kg/m2 at the first antenatal appointment [1]. There is increased anaesthetic involvement in the labour and delivery of these parturients and this requires careful planning to deliver a high quality anaesthetic service to this group [1]. Obstetric anaesthetists play a crucial role in caring for these patients with associated higher rates of caesarean section (CS), higher complication rates for anesthetic interventions as well as increased obstetric adverse events [2]. We used suggested standards from the Royal college of Anaesthetists and Royal College of Obstetricians and Gynecologists for reference in this service evaluation [1] [3].

Methods

A retrospective data analysis from a six-month period was conducted. Baseline birth data was noted. Parturients who delivered during this time with a booking BMI > 40 had their notes electronically reviewed to collect demographics, mode of delivery and anaesthetic intervention. Grade of anaesthetist and supervision level were also noted. Ethical approval was not required, it was a registered audit project.

Results

There were 1433 live births from 1415 women. Of these, 57 patients had a booking BMI >40 (4%), 5 patients had a BMI >50. A higher CS rate was noted in those with a BMI >40 at 60%, compared to those with a BMI <40 (40%), see figure 1 for category. Anaesthetic involvement required in 74% of cases. No category one CS were performed, one general anaesthetic (GA) was required at patient request. Grade of anaesthetist met the criteria of ST6 (or equivalent) in 75%. Antenatal assessment was completed in 35%, 100% with BMI >50 were seen antenatally, see figure 2.

✓

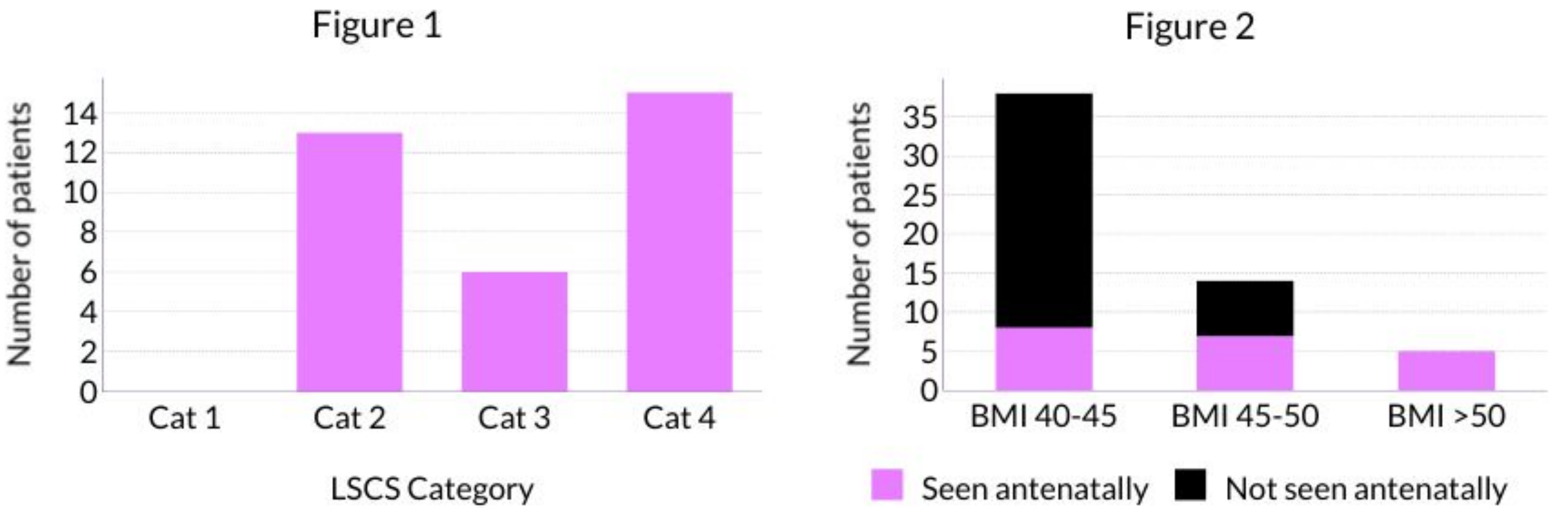
BMI >40 Mode of Delivery:
- 40% Vaginal Births
- 60% Caesarean Birth

✓

Anaesthetic input
provided in 74% of cases

✓

Anaesthetic care from
>ST6 in 76% of cases



Discussion

Providing safe obstetric care to these women has many challenges. Increasing rates of obesity provide a significant capacity issue particularly for antenatal assessment. Through a proactive approach many were delivered electively with senior anaesthetic presence. Antenatal assessment requires development, this will continue to present capacity issues and is a target for further evaluation. A pragmatic approach of providing written information antenatally for all women with a BMI >40 may help maintain clinic capacity for those at increased risk such as those with comorbidities or BMI >45. Raising awareness of the anaesthetic issues within anaesthetic, obstetric and midwifery teams can help establish a collaborative approach to managing these complex patients. Presentation of this data has increased understanding of potential issues and expected supervision levels. This has empowered resident anaesthetists working out of hours to feel able to call for help.

References

- Hoque N. Stocks G. Raising the Standards: RCOA Quality Improvement Compendium, 7.2 Anaesthetic care for women who are obese during pregnancy. Accessed at: https://www.rcoa.ac.uk/sites/default/files/documents/2024-09/21075%20RCoA%20Audit%20Recipe%20Book_16%20Section%20B.7_p241-268_Updated.pdf
- Patel, S. Habib A S. Anaesthesia for the paturient with obesity. British Journal of Anaesthesia Education, 2021; 21(5): 180-186. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8071724/pdf/main.pdf>.
- Denison FC, Aedla NR, Keag O, Hor K, Reynolds RM, Milne A, Diamond A, on behalf of the Royal College of Obstetricians and Gynaecologists. Care of Women with Obesity in Pregnancy.Green-top Guideline No. 72. BJOG 2018. Accessed at: <https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/1471-0528.15386>