

Obstetric obesity

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Abstract

This brief communication defines, describes and delineates the field of obstetric obesity. It lists the various challenges that a woman living with obesity may face during her obstetric career, in a solution-oriented manner. The authors call for greater awareness, and for teamwork, while managing obstetric obesity in a person-centred manner.

Keywords: Antenatal care, diabetes, obesity, overweight, pregnancy, PIH, person centred care, VTE.

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Introduction

Obstetric obesity refers to maternal obesity during pregnancy, defined according to body mass index at conception or during early (the first 18 weeks) pregnancy.¹ The rising prevalence of obesity, coupled with increasing age at pregnancy, has led to enhanced focus on this important aspect of health.

Challenge for The Woman

Women living with obesity have higher rates of subfertility, increased risk of pregnancy loss, and a greater chance of obstetric complications. These include antenatal and postnatal conditions such as gestational diabetes, pregnancy-induced hypertension, eclampsia and venous thromboembolism.² They also experience a more challenging and difficult labour, with slower progression of labour, higher need for labour induction and augmentation, and elevated odds of instrumental or operative delivery.

Post-operative complications such as wound infection and wound dehiscence are higher, as are other intraoperative injuries and blood loss requiring transfusion. Obstetric obesity is associated with macrosomia, premature rupture of membranes, chorioamnionitis and foetal distress. Thus, the syndrome impacts not only not only the mother, but

the foetus as well.³

Challenge for The Obstetrician

Another challenge, often ignored by non-obstetric medical experts, is the technical difficulty encountered in managing obstetric obesity. Diagnostic challenges, such as suboptimal ultrasonographic visualization, and foetal Doppler acoustics, access for amniocentesis, and visualization of the genital tract using conventionally sized speculum are common. The obstetrician or midwife may also find it difficult to make an accurate assessment of foetal growth and well-being, as well as cervical length, ripening and effacement in women with obesity. Therapeutic procedures, such as spinal or epidural analgesia, as well as the delivery itself, are much more difficult in women living with obesity.⁴

Obesity poses multiple challenges during caesarean section also, increasing both maternal and neonatal risks. Preoperative challenges include difficulty in positioning and venous access, increased risk of comorbidities (diabetes, hypertension, sleep apnoea). Intraoperatively, there may be technical difficulty in incision and exposure due to thick abdominal wall and excess adipose tissue, prolonged operative time and higher blood loss, difficulty in achieving adequate anaesthesia (especially regional). Post-operative complications include risk of wound infection, dehiscence, and seroma /haematoma formation. There may be delayed wound healing and thromboembolic events. Obese women have higher threat of respiratory complications, postpartum haemorrhage and anaesthesia-related morbidity

FIGO, taking cognizance of this, issued a position statement on management of obesity throughout a woman's lifecycle. This includes a detailed discussion on preconception, antenatal and postpartum care.⁵

The Way Forward

In this brief communication, we summarize the various facets of obstetric obesity (Table). We aim to sensitize policymakers and planners to the need to make provision for specialized obstetric obesity care. Obesity care professionals, usually led by endocrinologists, must be sensitized to the unique needs of women living with obesity. Obstetricians and gynaecologists should also remain abreast of advances in obesity medicine, and informed about various interventions which can mitigate

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weight-related risks. A planned and supervised pregnancy, after all modifiable risk factors have been addressed, is the best way to achieve optimal outcomes in obstetric obesity.

Table-1: Facets of obstetric obesity management.

Preconception
● Screening for obesity/overweight and its comorbidities/complications. ● Explanation about potential obstetric and general risk, and how to mitigate them. ● Effective evidence-based strategies, based upon shared and informed decision making. ● Effective contraception, if indicated. ● Simultaneous, or sequential fertility therapy, as indicated.
All trimesters
● Appropriate nutritional and physical activity advice. ● Monitoring of gestational weight gain. ● Monitoring of foetal well-being. ● Monitoring for potential metabolic abnormalities, including gestational diabetes mellitus. ● Monitoring for potential vascular complications, including preeclampsia. ● Shared decision making with endocrinologist/ metabolic physician and ultrasonologist.
2nd and 3rd trimesters
● Institution of aspirin prophylaxis, if indicated. ● Administration of antenatal corticosteroid therapy, if indicated. ● Lower threshold for use of aspirin, antenatal corticosteroids, metformin.
Labour
● Use of left lateral decubitus position for assessment. ● Use of larger sized specula, blood pressure cuffs; longer needles and needle holders.
Caesarean delivery
● Meticulous preoperative planning, multidisciplinary care, and ● Emphasis on infection prevention, anaesthesia optimization, and thromboprophylaxis to minimize complications.
Post-delivery
● Immediate breastfeeding. ● Early mobilization. ● Institution of prophylactic measures against venous thromboembolism (VTE).
Post partum
● Regular postpartum follow-up and screening for associated illnesses. ● Appropriate lifestyle, diet and physical activity advice. ● Pharmacotherapy for obesity if not contra indicated.
Neonatal care
● Higher rates of foetal macrosomia, birth trauma, and respiratory distress. ● Availability of neonatal intensive care. ● Early breastfeeding.
Health care system
● Provision of appropriately sized hospital furniture, including stretchers, operating/ delivery tables. ● Provision of large sized instruments. ● Availability of "well-built" hospital staff.
Involvement of family and community
● Involvement of family in educational activities. ● Sharing of socially appropriate low-calorie foods and recipes for pre-birthing and post-birthing use. ● Encouragement of family approach towards healthy lifestyle.
Health care delivery
● Use of obesity-friendly language. ● Avoidance of bias, stigmatization or sarcasm, both verbal and nonverbal.

References

1. McAuliffe FM, Killeen SL, Jacob CM, Hanson MA, Hadar E, McIntyre HD, et al. Management of prepregnancy, pregnancy, and postpartum obesity from the FIGO Pregnancy and Non-Communicable Diseases Committee: A FIGO (International Federation of Gynecology and Obstetrics) guideline. *Int J Gynaecol Obstet.* 2020 ;151 Suppl 1(Suppl 1):16-36. doi: 10.1002/ijgo.13334. PMID: 32894590; PMCID: PMC7590083
2. Kapoor N, Arora S, Kalra S. Gender disparities in people living with obesity-an uncharted territory. *J Midlife Health..* 2021;12:103-7. doi: 10.4103/jmh.jmh_48_21.
3. Kalra B, Kalra S, Unnikrishnan AG, Baruah MP, Khandelwal D, Gupta Y. Transgenerational karma. *Indian J Endocrinol Metab.* 2017;21:265-7.
4. Kapoor N, Sundaram M, Kalra S. Anesthesia in patients with severe obesity: An uncharted journey. *J Pak Med Assoc* 2025; 75:1819-21.
5. Maxwell CV, Shirley R, O'Higgins AC, Rosser ML, O'Brien P, Hod M, et al. Management of obesity across women's life course: FIGO Best Practice Advice. *Int J Gynaecol Obstet.* 2023 Jan;160 Suppl 1(Suppl 1):35-49. doi: 10.1002/ijgo.14549. PMID: 36635081; PMCID: PMC10107516.