A Case of Active Carcinoid Syndrome During Pregnancy in a District General Hospital

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Introduction

- Carcinoid syndrome = hormone (serotonin) secretion from NETs
- UK prevalence increasing (3.9 → 8.8 per 100,000)
- Carcinoid crisis:
  - Haemodynamic instability
  - Arrhythmias
  - Bronchospasm
- Pregnancy & surgery = triggers
- Requires rapid recognition + management

Case Presentation

- 38F (G2P1) with metastatic midgut NET
- Diagnosed postpartum (after first child) due to abdominal pain
- Liver metastases + biopsy confirmed NET
- Symptoms:
  - Flushing
  - Tachycardia
  - Dizziness
- 5-HIAA: 591.5 µmol/24h
- Managed with **Lanreotide**

Patient then got pregnant again

- Symptoms worsened

Peri-operative care

MDT Planning:

- Multidisciplinary input:
  - Obstetrics
  - Anaesthetics
  - Pharmacists
  - Neuroendocrine team
- Planned:
  - Elective C-section (38 weeks)
  - Pre-op **octreotide infusion ≥12h**

Emergency Course:

- Presented 36+4 weeks:
  - ROM + contractions
- Developed:
  - Dizziness
  - Fetal bradycardia
    → Emergency Category II C-section

Management:

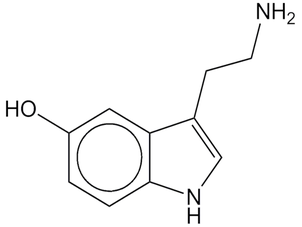
- Arterial line
- Spinal anaesthesia
- Phenylephrine infusion
- Octreotide titration

Post-operative

- Uncomplicated delivery
- Healthy neonate

Post-op:

- Stable in critical care (12h)
- After stopping octreotide:
  - Flushing
  - Hypotension
  - → Restarted SC octreotide (weaning)
- Discharged Day 5



Discussion

Increasing Incidence

- NET incidence rising; clinicians increasingly encounter carcinoid syndrome

Diagnostic Challenge

- Non-specific symptoms delay diagnosis, often presenting with advanced metastatic disease

Pregnancy Risk

- Pregnancy-related physiological stress exacerbates carcinoid syndrome and crisis risk
- Fetal activity may trigger symptom exacerbation
- Labour, anaesthesia, and surgery can precipitate carcinoid crisis

System Preparedness

- Ensure drug availability and staff awareness at all times

Role of Octreotide

- Octreotide prevents mediator release and stabilises haemodynamics
- Continuous infusion and titration required perioperatively

Rebound Risk

- Abrupt cessation causes hypotension and symptom recurrence
- Gradual octreotide weaning prevents rebound symptoms

MDT Importance

- Multidisciplinary planning improves safety and outcomes
- Clear protocols and communication are essential in emergencies

Training

- Staff education improves readiness for rare, high-risk scenarios
- Safe management achievable in non-tertiary centres with structured planning

References

- Gade A et al. Cureus, 2020
- White et al. Lancet Reg Health Eur, 2022
- Bardasi C et al. Cancers, 2022
- UK Cancer Statistics, 2022