

Ovarian Hyperstimulation Syndrome (OHSS)

For the reluctant obstetrician...



@Obcast



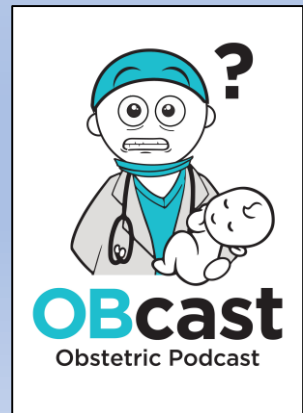
OHSS

- OHSS is a complication of fertility treatment
- Ovaries are stimulated pharmacologically to increase the eggs (and thus embryos) available
 - Commonly FSH
- OHSS can occur in when stimulated ovaries are exposed to hCG or LH
- Leads to production of proinflammatory cytokines – e.g. VEGF + others
- Main issue = increased vascular permeability and third-spacing



OHSS

- Uncommon presentation, up to 1-5% of assisted fertility
- Need to have suspicion
- Clinical diagnosis
 - Suggestive features:
 - Abdominal bloating / discomfort
 - Nausea and vomiting
 - Breathlessness (can have a variety of causes)
 - Leg / Vulval swelling
 - Reduced urine output
- Ix:
 - Bloods: FBC, UEC, LFTs, coags, CRP*
 - US scan: Ovarian size / ascites / ? Torsion



Severity of OHSS

Category	Features
Mild OHSS	Abdominal bloating Mild abdominal pain Ovarian size usually < 8 cm ^a
Moderate OHSS	Moderate abdominal pain Nausea ± vomiting Ultrasound evidence of ascites Ovarian size usually 8–12 cm ^a
Severe OHSS	Clinical ascites (± hydrothorax) Oliguria (< 300 ml/day or < 30 ml/hour) Haematocrit > 0.45 Hyponatraemia (sodium < 135 mmol/l) Hypo-osmolality (osmolality < 282 mOsm/kg) Hyperkalaemia (potassium > 5 mmol/l) Hypoproteinaemia (serum albumin < 35 g/l) Ovarian size usually > 12 cm ^a
Critical OHSS	Tense ascites/large hydrothorax Haematocrit > 0.55 White cell count > 25 000/ml Oliguria/anuria Thromboembolism Acute respiratory distress syndrome

Management of OHSS

- Largely supportive
 - Defend intravascular volume
 - oral better than IV if tolerated (generally guided by thirst if possible)
 - Crystalloids mostly , some role for colloids
 - Generally not diuretics
 - Supportive care:
 - O2 as needed
 - Analgesia
 - Antimetics
 - Mx of complications:
 - Paracentesis: Severe distension/pain, SOB/respiratory failure, oliguria despite fluid Mx (goal to reduce intraabdo pressure and improve renal perfusion)
 - VTE prophylaxis – TEDS / LMWH
 - Ix / Mx if suspected ovarian torsion (large ovary)

Note: Risks to later pregnancy: ↑ pre-eclampsia + preterm birth

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