Sepsis & A Failing Heart

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Puerperal sepsis is one of the **leading causes** of complications in pregnancy

Group A streptococcus (GAS) is **20x more likely** in postpartum women

GAS sepsis can lead to severe **cardiomyopathy** and **death**

Our Patient & Her Story

34-year-old G2P0 ASA 2

History of **ulcerative colitis** with prior abdominal surgeries including a total colectomy and **ileoanal pouch anastomosis**

Planned for a **scheduled cesarean section** under a combined spinal-epidural due to her prior abdominal surgeries

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POD 0

Uncomplicated cesarean section under CSE in the setting of **maternal ulcerative colitis** and history of **total colectomy** and **ileoanal pouch anastomosis**

POD 1

Moderate **abdominal pain** that improved with flatulence and stooling. NG tube placed with low output

ABD XR indicated ileus, showed **no bowel obstruction**

POD 2

Hypotension, tachycardia, abdominal pain. CT A/P demonstrated **severe narrowing of ileoanal anastomosis** and **possible stricture**.

Larger NG tube placed with immediate **1.3L output**.

IVF resuscitation overnight for hypotension

POD 3

Transferred to SICU for **worsening hypotension** where IVF **resuscitation, vasopressors, and antibiotics** provided. Bedside TTE with **LVEF 45%**

Emergent ex-lap revealed intact bowel. TEE indicated worsening cardiac function with **LVEF 25%** despite inotropic support

Femoral artery access obtained to prepare for possible **VA ECMO cannulation** due to worsening hemodynamics. Decision made to proceed with hysterectomy, revealing an **inflamed and necrotic uterus**

POD 4-14

Extubated POD 4, weaned off vasopressor and inotropic support with **return of LV function** on POD 5

Ultimately discharged home with her son on POD 14

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Learning Points

GAS sepsis leads to release of endotoxins, contributing to **cardiac myocyte dysfunction**

This cardiomyopathy is associated with **hypotension**, lactic acidosis, and a **decreased cardiac output** with normal SVR

Management: **supportive care**, **early antibiotics**, and **source control**

References

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