

WHEN CTG LEADS TO PRENATAL DIAGNOSIS: TWO CASES OF FETAL INTESTINAL VOLVULUS

N I N A N A V A K U M A R ¹, A L I C E P A S T I D E S ¹, L U C I U S B A L T O A I C A ¹, M A N H O K W O K ¹, S U S A N A P E R E I R A ¹, E L E N A G R E C O ^{1, 2}.

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Introduction

Intestinal volvulus (IV) is the twisting of bowel around the mesentery, compromising circulation and potentially causing **bowel necrosis**, **hemoperitoneum**, and **fetal anaemia**.

Prenatal diagnosis is rare and challenging. Ultrasound signs include:

- Non-specific:** bowel dilatation, polyhydramnios, ascites

- Specific:** *whirlpool sign*, *coffee bean sign*

Most cases are detected **after 32 weeks**. We report **two early cases** at 28 weeks.

Case 1

Patient: 37-year-old, para 2

Presentation: 28 weeks, **RFM**

cCTG: STV < 2.6 ms, **sinusoidal pattern**

Ultrasound: Coffee-bean sign, Whirlpool sign,

MCA-PSV >1.5 MoM

Intervention: Emergency C-section

Findings: Hb 75 g/L, 15 cm gangrenous bowel → resection + jejunostomy

Outcome: NICU recovery



Case 2

Patient: 28-year-old, para 1

Antenatal History: Echogenic bowel at 20 weeks

Presentation: RFM at 28 weeks

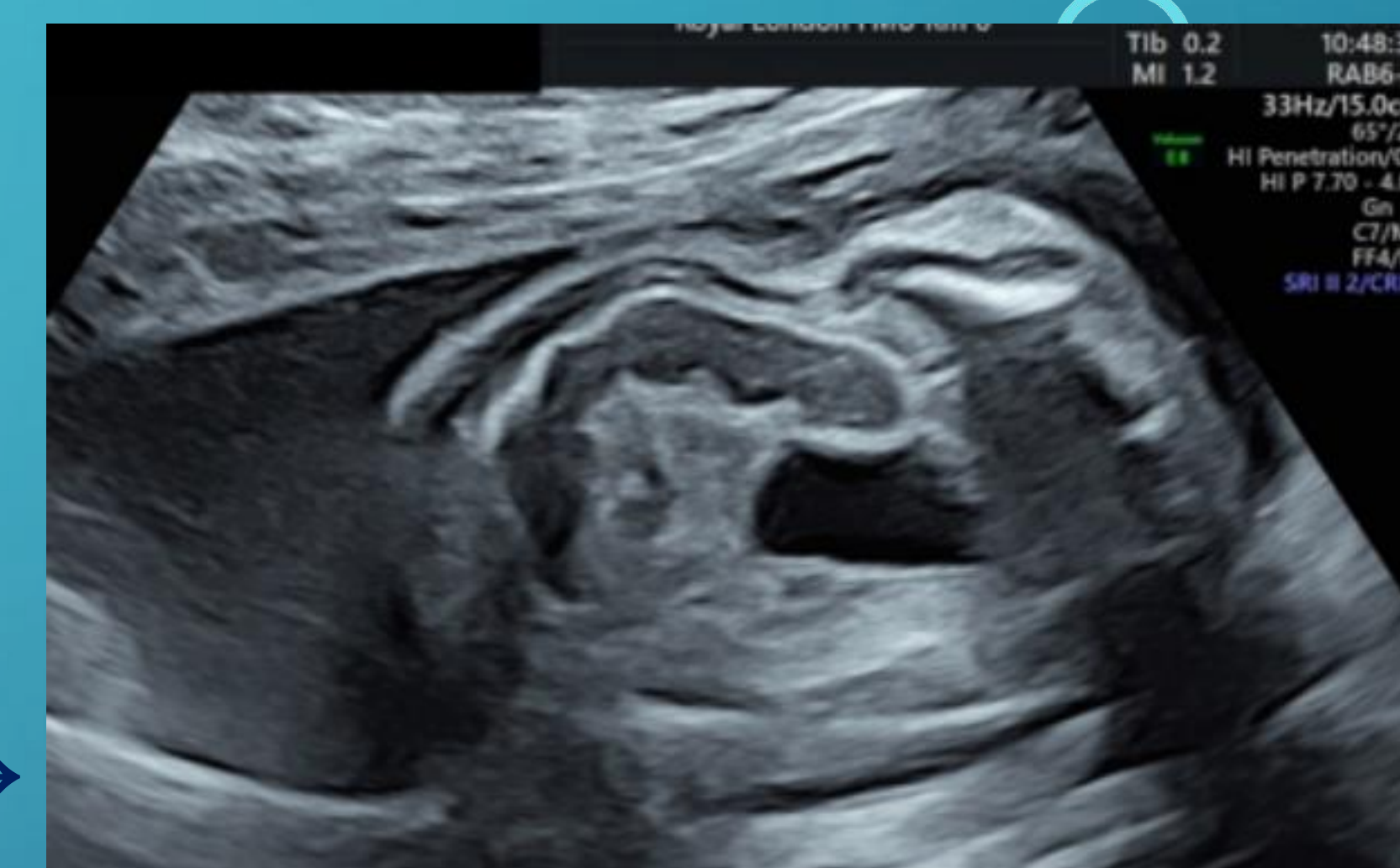
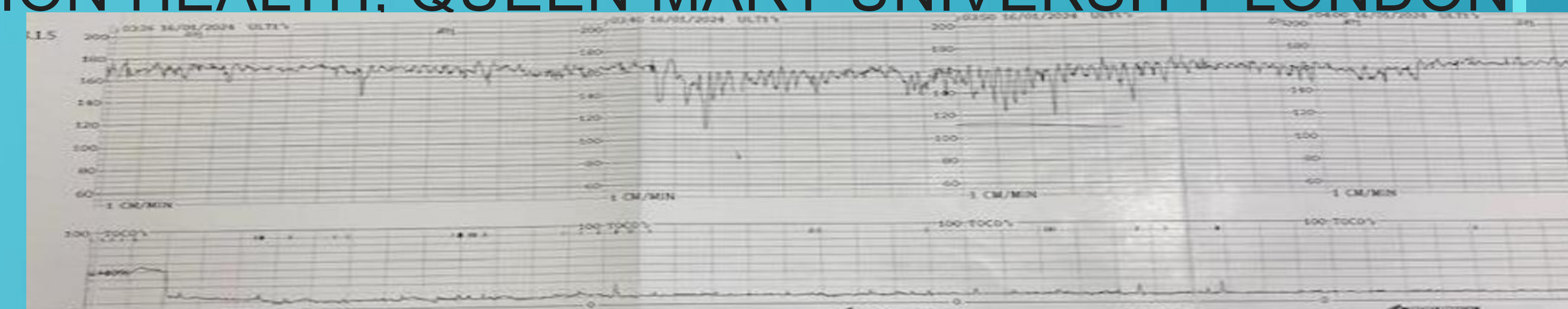
cCTG: STV 4.9 ms, sinusoidal pattern, fetal hypoxia

Ultrasound: Dilated loops, whirlpool sign, fetal anemia

Intervention: Emergency C-section

Findings: Hb 74 g/L, bowel necrosis and perforation →

Outcome: Uncomplicated neonatal recovery



Discussion

- Fetal IV** is a rare cause of **fetal anaemia**

- cCTG provided **early suspicion** in both cases

- Diagnostic dilemmas:**

- In-utero transfusion vs early delivery

- Emergency delivery** at 28 weeks likely prevented:

- Fetal demise

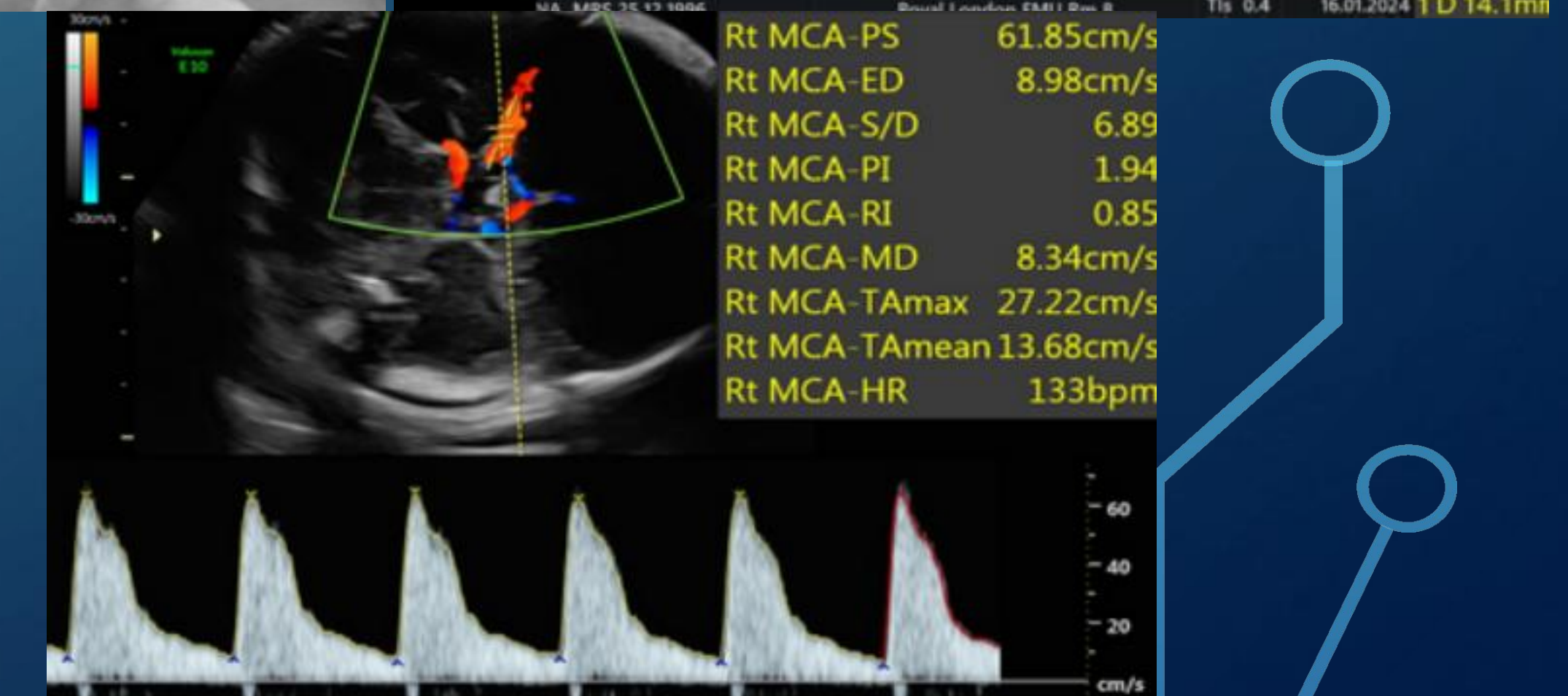
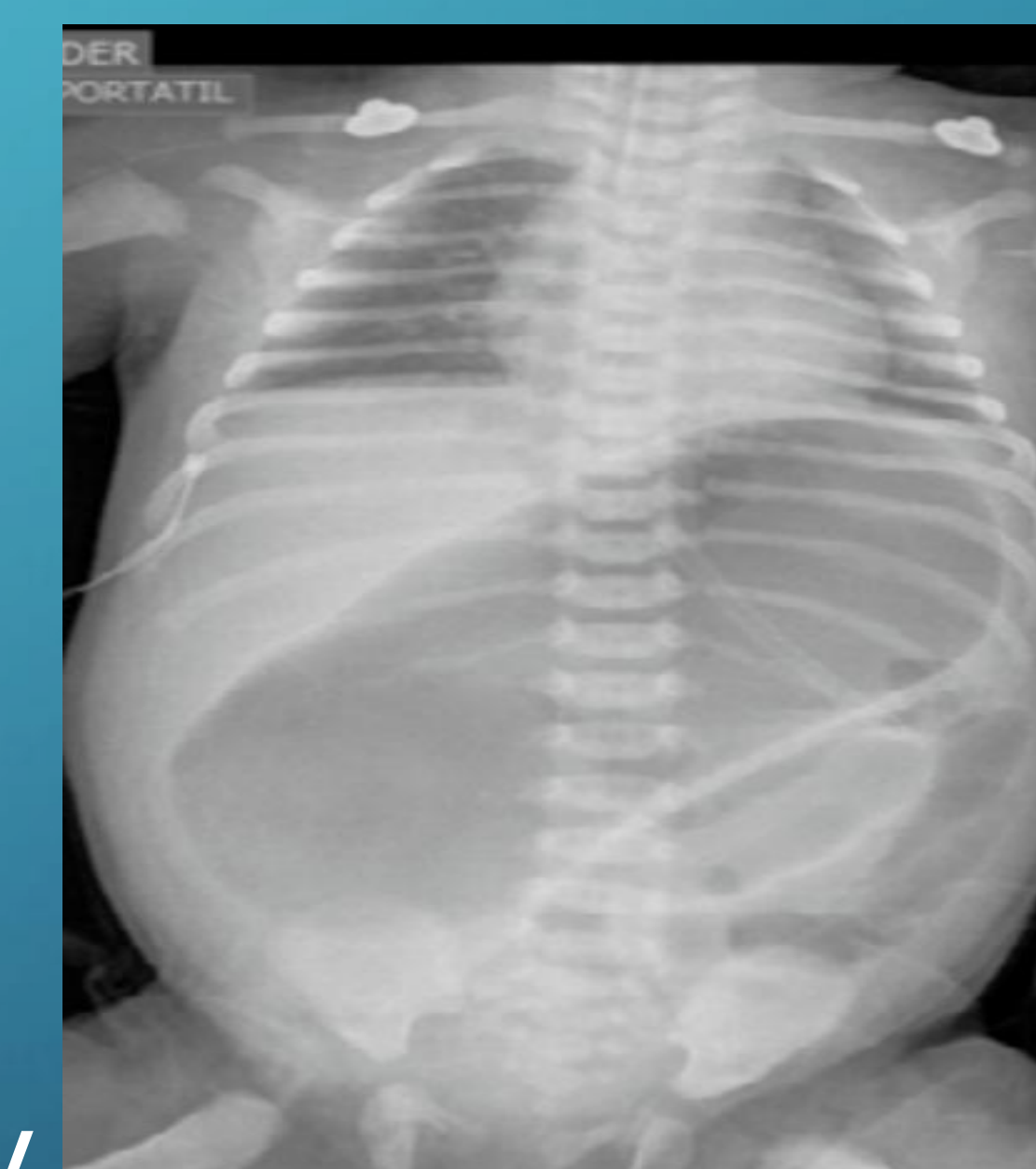
- Extensive surgical complications

Conclusion

- Early signs: **RFM**, abnormal **cCTG**, and **ultrasound whirlpool sign**

- Incorporating cCTG** in suspected prenatal IV improves outcomes

- Timely delivery (<32 weeks)** may reduce neonatal morbidity/mortality



References

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