MATERNAL NEAR MISS AND CLINICAL OUTCOMES IN TWIN PREGNANCIES WITH COMPLETE HYDATIDIFORM MOLE AND COEXISTING FETUS:

EXPERIENCE FROM A TROPHOBLASTIC DISEASE CENTER IN SOUTHEASTERN BRAZIL

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10/758 — CHMCF cases — 1.3% of hydatidiform moles

80% — Medical complications — 8 of 10 patients

60% — Potentially life-threatening conditions — 6 of 10 patients

30% — Maternal near miss — 3 of 10 patients

40% — Progression to GTN — 4 of 10 patients

OBJECTIVES

To evaluate maternal near miss events, potentially life-threatening conditions (PLTCs), pregnancy outcomes, and progression to gestational trophoblastic neoplasia (GTN) in twin pregnancies with complete hydatidiform mole and coexisting fetus (CHMCF).

METHODS

- STUDY DESIGN → Retrospective case series
- POPULATION → Women with CHMCF referred to Unesp (1995-2024).
- DATA COLLECTION → Medical records review
- CRITERIA → WHO criteria for PLTCs and maternal near miss.

CLINICAL PROFILE & COMPLICATIONS

Among **758 cases** of hydatidiform mole, **10** (1.3%) **CHMCF** were identified.

At diagnosis:

- Median gestational age: 17 weeks (IQR 12–20)
- Median serum hCG: 730,406 IU/L (IQR 220,824–1,103,344)

Medical complications - 8/10 (80%)

- Vaginal hemorrhage: 6/10
- Preeclampsia: 4/10
- Clinical hyperthyroidism: 1/10
- Respiratory distress: 1/10

SEVERE MATERNAL OUTCOMES

Potentially life-threatening conditions - 6/10 (60%)

- Blood transfusion: 5
- Postpartum hemorrhage: 3
- Severe preeclampsia: 3
- Thyroid crisis: 1
- Respiratory failure: 1

Maternal near miss - 3/10 (30%)

- Hypovolemic shock secondary to postpartum hemorrhage: 2
- Acute cyanosis (SpO_2 <90%) requiring cardiopulmonary resuscitation: 1

PREGNANCY OUTCOMES

- Pregnancy termination after counseling: 3/10
- Spontaneous abortion: 3/10
- Termination due to medical complications: 2/10
- Spontaneous preterm delivery: 2/10

All patients undergoing induction of labor of a live fetus beyond 16 weeks with an unfavorable cervix required blood transfusion (3–6 units).

MATERNAL DEATH & GTN PROGRESSION

1 Maternal death

Due to severe respiratory insufficiency during pregnancy termination for severe preeclampsia. The patient had a live fetus at 19 weeks and a firm, long, closed cervix.

40% developed GTN

Median hCG was higher in patients who progressed to GTN → **974,868 vs. 585,776 IU/L** (P=0.221)

CLINICAL AND IMAGING FINDINGS

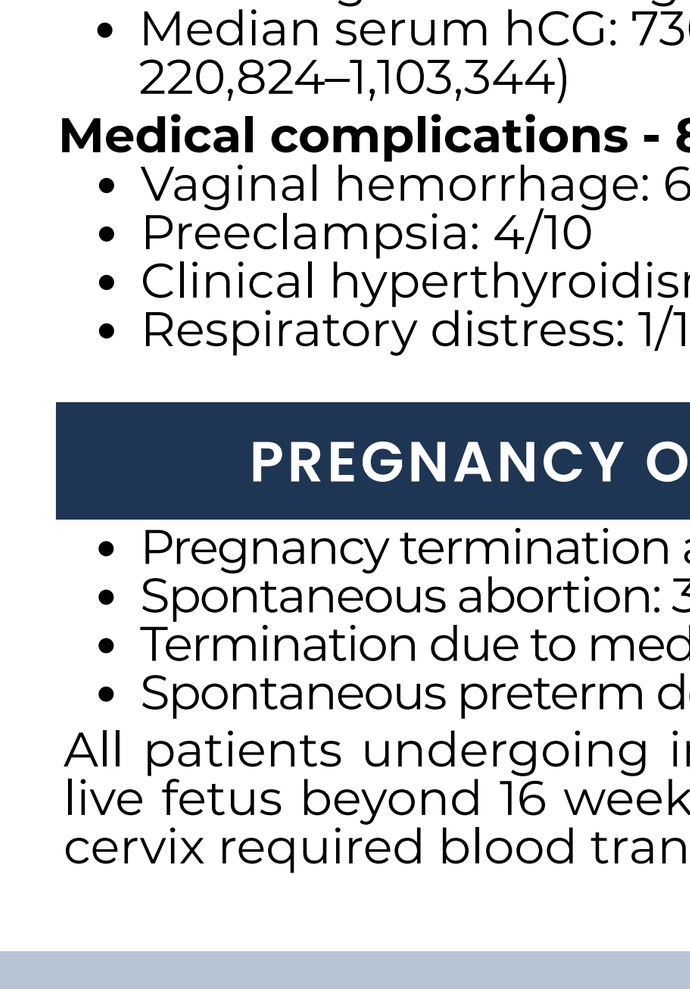


FIG.1 ULTRASOUND OF CHMCF

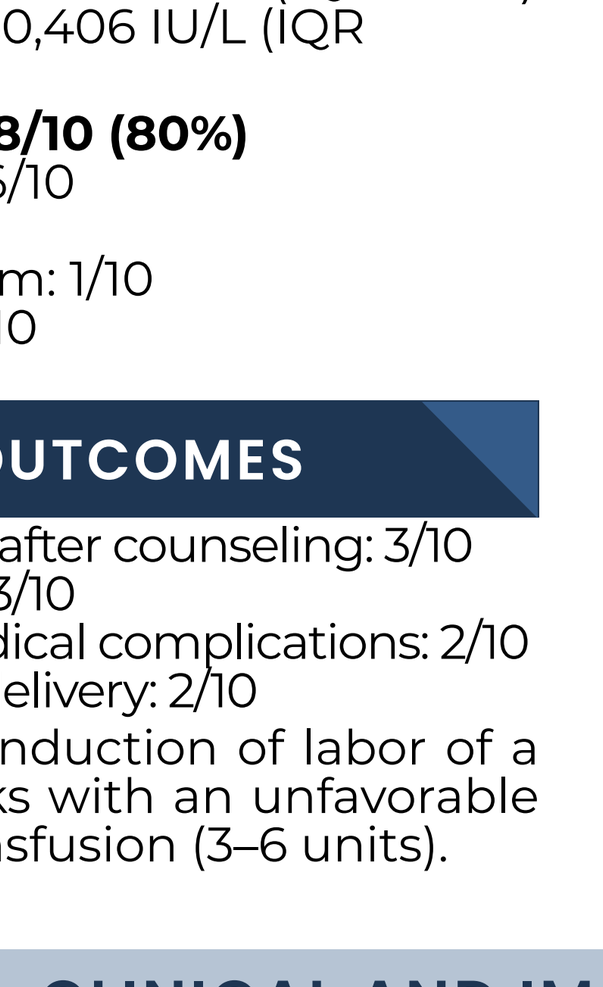


FIG.2 ULTRASOUND OF CHMCF (INTERAMNIOTIC MEMBRANE)

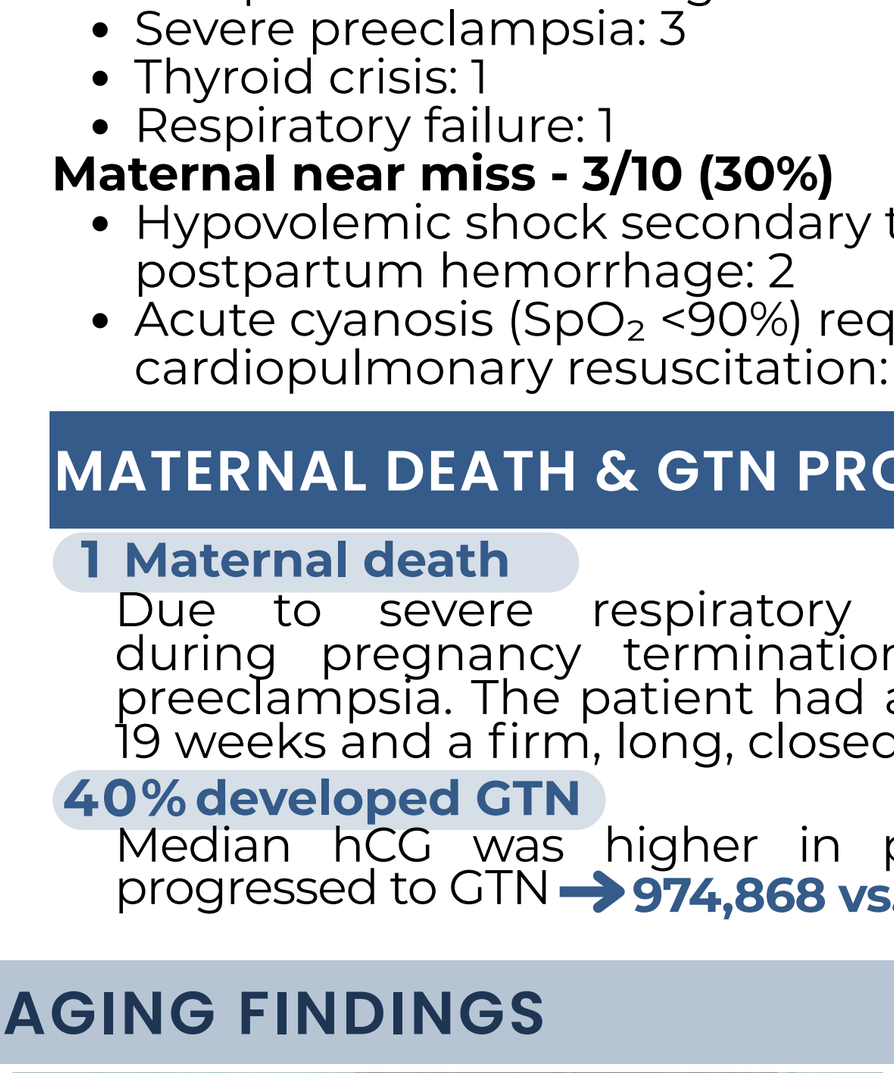


FIG.5 UTERINE EVACUATION PRODUCT: A FETUS CONNECTED TO A NORMAL PLACENTA ALONGSIDE A COMPLETE HYDATIDIFORM MOLE IN A TWIN PREGNANCY.



FIG.3 ULTRASOUND WITH COLOR DOPPLER OF CHM



FIG.4 ULTRASOUND OF CHMCF (FETAL PLACENTA)



FIG.6 KARYOTYPE RESULT: CHROMOSOMALLY NORMAL MALE FETUS (46,XY)

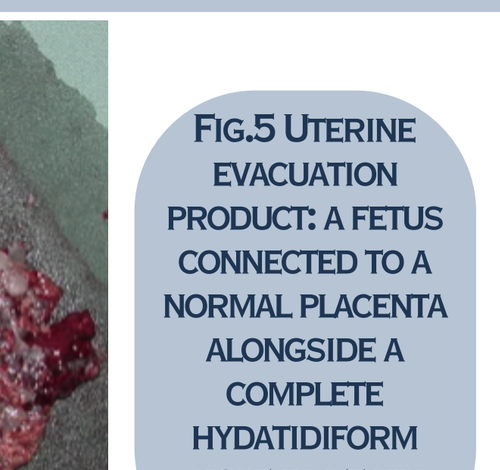


FIG.7 IMMUNOHISTOCHEMICAL RESULT: NEGATIVE P57

CONCLUSIONS & CLINICAL IMPLICATIONS

Twin pregnancies with CHMCF are associated with substantial maternal morbidity, including a high rate of PLTCs and near miss events. Hemorrhage and preeclampsia were major contributors to severe maternal outcomes. Multidisciplinary management, careful counseling, and preparedness for blood transfusion are essential to prevent severe complications. Close follow-up is also recommended as the CHMCF is associated with an increased risk of GTN progression.