

A rare case of Acute Myeloid Leukaemia in Pregnancy

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INTRODUCTION

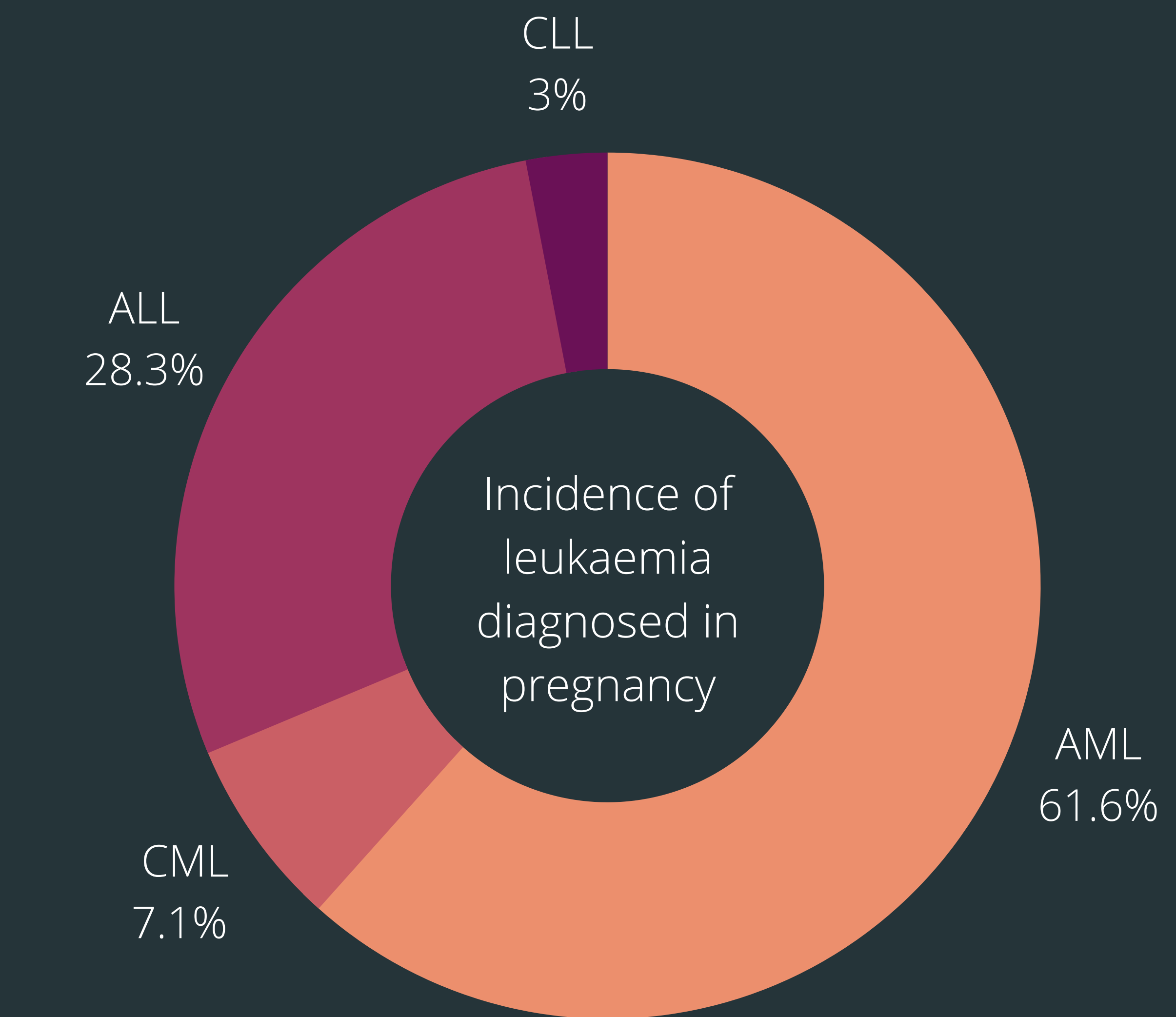
- Leukaemia in pregnancy is rare, with an incidence of 1 in 75000 to 100000 pregnancies. Approximately 90% of leukaemias which occur during pregnancy are acute leukaemia.
- Acute leukaemia in pregnant women requires a rapid diagnosis because it can be life-threatening for the mother and baby. However, the similarity of some of the symptoms in pregnancy and leukaemia, such as weakness, fatigue, shortness of breath and anaemia may make diagnosis difficult.

CASE REPORT

- 28-year-old P3+1, who had regular antenatal visits from 9 weeks gestation.
- Previously healthy, her BMI was 29 and VTE score 2.
- Family history showed breast cancer for her aunt and prostate cancer for her paternal grandfather.
- At 36 weeks she complained of fatigue, tiredness, and gum bleeding.

INVESTIGATIONS

- Her Complete Blood Count showed leucocytosis (WBC 34*10⁹/L with Blasts 85%) and Haemoglobin 10.8gm/L and Platelet 34*10⁹/L.
- Foetal growth was normal.
- Peripheral flow cytometry was suggestive of Acute Myeloid Leukaemia (AML).



Gestational stage	Effects
First trimester	Spontaneous abortion, Organogenesis
Second and Third trimester	Growth Restriction, Intrauterine death or Neonatal death, Prematurity and Myelosuppression

Table 1 Effects of chemotherapy during pregnancy

TREATMENT

- As she was 36 weeks, she had induction of labour with a plan for further investigations and chemotherapy induction after delivery.
- Multidisciplinary team involving Haematologist, Obstetrician, Anaesthetist and Neonatologist were crucial in her management.
- She received 12 units platelets intrapartum and Injection Morphine subcutaneous for analgesia. She had a normal delivery with blood loss of 150 mL.
- She had bone marrow aspiration biopsy next day which confirmed diagnosis of AML and was started on induction chemotherapy.
- After appropriate chemotherapy, she is in remission at 1 year after diagnosis.

DISCUSSION

- Although many symptoms of leukaemia and normal pregnancy are similar, a timely Complete blood count and further investigations will help to diagnose leukaemia and appropriate chemotherapy can be initiated without delay.
- Studies has shown that, in general, initiation of chemotherapy as early as possible may increase the complete remission rate. For patients diagnosed in early and late stages of pregnancy (>30 weeks), elective termination or induced delivery before chemotherapy may be a good choice for better maternal and fetal outcome.

REFERENCES

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