

## **DOWN'S SYNDROME: BLOOD DISORDERS / LEUKAEMIA**

### **Key Points**

*(based on conference paper by Professor Judith Chessells at RSM conference. April 2001)*

- **Over 60% of neonates polycythaemic – unrelated to congenital heart disease**
- **MCV increased at all ages**
- **Almost unique risk of transient abnormal myelopoiesis (TAM) in newborns (approx 10%)**
  - **Morphologically indistinguishable from megakaryocytic leukaemia**
  - **Usually asymptomatic**
  - **Usually resolves spontaneously without treatment**
  - **Around 25% with TAM may develop acute myeloid leukaemia (AML) later in childhood**
- **Childhood leukaemia 20 times more frequent than in other children. Risk around 1/100. Both AML and ALL (acute lymphoblastic leukaemia). AML is usually megakaryoblastic (very rare in other children ).**
- **Children should be entered in national leukaemia trials and should usually be treated according to protocol.**
- **Response to treatment of both AML and ALL is good. 5 year survival for AML in the UK around 60% ( same as other children). For ALL around 75% (poorer than other children).**
- **Increased risk of death whilst on intensive therapy both during induction and further treatment, because of inherent increased susceptibility to infection. Extreme vigilance and maximum supportive care is necessary at these times.**
- **Relapse rate less than for other children- survival difference is largely due to increased risk of death during treatment**
- **Peak age at onset of leukaemia is before 4 years. No cases recorded after age 29. Low risk of other childhood cancers.**