Immunophenotypes of acute lymphoblastic leukaemia in Iraqi patients: a hospital-based study

Comment [FC1]: Kindly note we have changed the titles slightly.

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ABSTRACT We studied the immunophenotypes of 64 newly diagnosed cases of acute lymphoblastic leukaemia (ALL) in Basra Military Hospital – 39 children and 25 adults. By FAB criteria, L2 was the commonest morphological subtype (89.0%). Common (C) ALL was the most prevalent phenotype (42.2% of cases), followed by T-ALL (40.6%) and null-ALL (17.2%). No B-ALL cases were found. C-ALL was the most frequent phenotype found in children (53.8%), followed by T-ALL (41.0%). In adults, T-ALL was the most common phenotype (40.0%), followed by null-ALL (36.0%) and common ALL (24.0%). T-ALL was the most prevalent phenotype in males (51.1%) while in females C-ALL was the most prevalent phenotype (57.2%).

Introduction

Acute lymphoblastic leukaemia (ALL) has long been recognized to be morphologically and clinically heterogeneous. The underlying philosophy of differential diagnosis of ALL by haematological criteria is to compare the morphological and cytochemical features of leukaemic blasts with their presumed normal counterparts.

In the past decade, there have been significant advances in the characterization of cell surface molecules (markers). The application of these markers to the study of ALL has begun to advance our understanding of the heterogeneity and the biological and clinical behaviour of this tumour. It is now possible to assign a lineage derivation to a neoplastic haemopoietic cell in virtually all cases by the expression of lineage restricted antigens. By defining stages of T or B lymphocyte differentiation, it is possible to identify subsets of ALL patients who demonstrate unique clinical presentation and disease courses [*1,2*].