شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

TRANSLOCATION (12;21) "A RECENT PROGNOSTIC CYTOGENETIC ABNORMALITY IN PEDIATRIC B-CELL PRECURSOR (BCP) ACUTE LYMPHOBLASTIC LEUKEMIA"

Thesis

Submitted for Partial Fulfilment of M.D. Degree in Clinical Pathology

By

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(M.Ch. Clinical Pathology)

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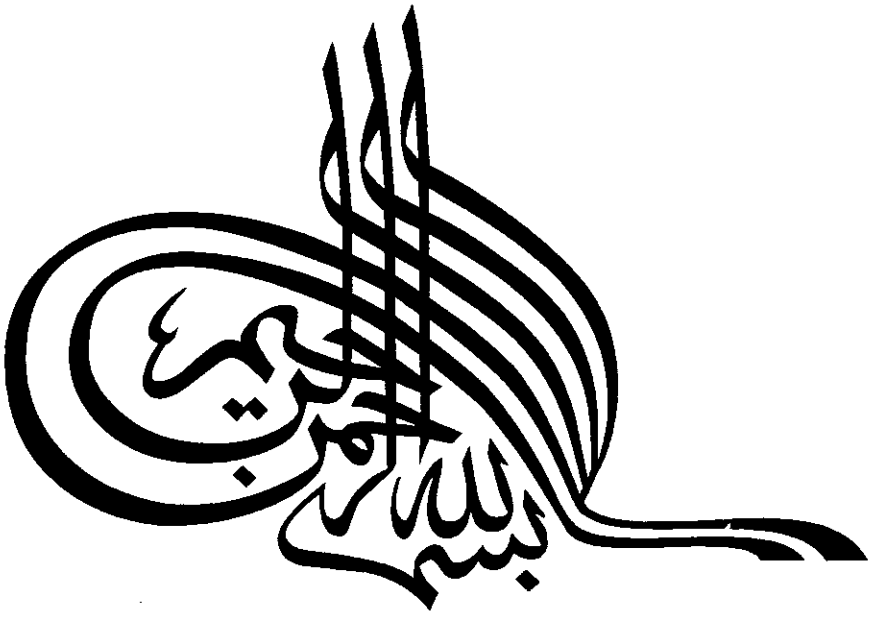
بسم الله الرحمن الرحيم

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ABSTRACT

ALL is the most common form of childhood leukemia. Several factors including genetic changes, in particular chromosomal translocation has yielded a wealth of information on the mechanism of leukemogenesis, disease prognosis, monitoring the patient response to treatment and predicting MRD.

In the current study, cytogenetic analysis was done on 25 children suffering from BCP-ALL by both conventional cytogenetic analysis (G-banding) and by FISH using LSI probe for detection of t(12;21). Successful karyotyping was encountered in 19/25 (76%) patients with failure of mitosis in 6 (24%) patients. Both numerical and structural chromosomal aberrations were detected in 11/19 (57.8%) patients.

Massive hyperdiploidy (>50 chromosomes) was encountered in 2/19 (10.5%) patients and was associated with better prognosis than other patients with hypodiploidy 5/19 (26.3%) or structural aberrations in 5/19 (26.3%) patients. Metaphase and interphase FISH analysis of ALL patients revealed positive detection of t(12;21) in 6 (24%) patients, one of them was associated with del(12) detected by FISH, while conventional karyatyping revealed hyperdiploidy and del (3q) & del (13q) in two patients. More over FISH analysis allowed detection of trisomy 21 in one (4%) case.

Follow up of the six positive cases for t (12;21) by FISH, revealed negative results in 5/6 (83.3%) patients while the last one (16.7%) remained positive. The patient experienced relapse 3 months after achieving remission despite absence of any landmark of hematological relapse at time FISH analysis.

FISH technique provides a simple, rapid, specific and reliable methods for detecting chromosomal aberration not only in metaphase but also in interphase where conventional cytogenetic analysis could not be applied.