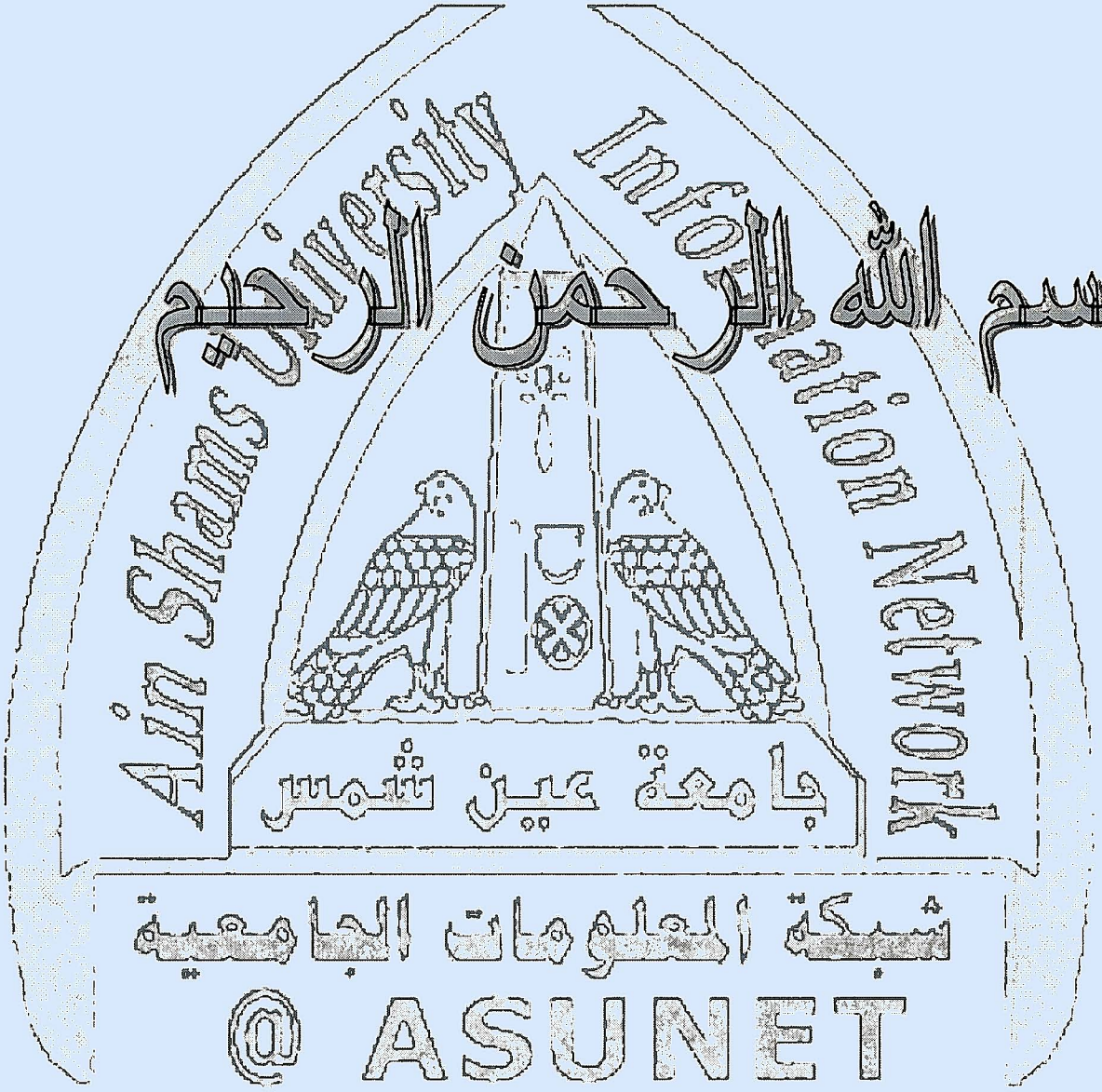
شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار
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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

بعض الوثائق الاصلية تالفة

CHROMOSOMAL ABNORMALITIES

IN

MYELODYSPLASIA & ACUTE MYELOID LEUKEMIAS

Thesis

Submitted in Partial Fulfillment of the Master Degree in Clinical Pathology

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Cairo (2000)

بسم الله الرحمن الرحيم

﴿ قالوا سبحانك لا علم لنا إلا ما علمتنا إنك أنت العليم الحكيم ﴾

صدق الله العظيم

(سورة البقرة – الآيـــة ٣٢)

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List of abbreviations and terminology used in describing chromosomes and their abnormalities:

p	Short arm of a chromosome
q	Long arm of a chromosome
p+, q+	Addition of chromosomal material to the short arm or the long arm, respectively.
p-, q-	Loss of chromosomal material from the short arm or the long arm, respectively.
+	Addition of a chromosome
-	Loss of a chromosome
Add	Additional material of unknown origin
Band	Chromosomal region that, after staining, is distinguished from adjoining regions by appearing lighter or darker
C	Constitutional anomaly
Del	Deletion
Der	Derivative chromosome, an abnormal chromosome derived from two or more chromosomes; it takes its number from the chromosome which contributes the centromeres
Dic	Dicentric, a chromosome with two centromeres
Dm	Double minute
Dup	Duplication, extra copy of the segment a chromosome
Hsr	Homogeneously staining region, indicative of amplification of a small segment of a chromosome
Inv	Inversion, i.e. A segment of a chromosome has been inverted
Ins	Insertion, movement of a segment of a chromosome to a new position on the same or another chromosome, maybe direct (dir) or inverted (inv)
Iso or i	Isochromosome, a chromosome formed by duplication of the long arm or the short arm
Mar	Marker chromosome, an abnormal
Min	Minute, an acentric fragment smaller than width of a single chromatid; may be single or double ring chromosome
r	Ring chromosome

List of abbreviations and terminology used in describing chromosomes and their abnormalities (cont):

t	Translocation, movement of a segment of one chromosometo form part of another chromosome
aneuploid	Cells having an abnormal number of chromosome that in neither half nor a multiple of 46
Centromere	The junction of the short arm (p) and the long arm (q)
Diploid	Cells having the normal complement of 46 chromosomes (23 pairs)
Haploid	Cells with 23 chromosomes
Hypodiploid	Cells having fewer than 46 chromosomes
karyotype	Written description of the chromosomal make-up of a cell and by extension of a clone of cell
Karyogram	Systematized array of the chromosomes of a cell and by extension of a clone of cells; chromosomes are displayed in decreasing order of size; which corresponds to increasing chromosome number; sex chromosomes (X and Y) are displayed last
Monosomy	Loss of an entire chromosome so that there is only a single copy, indicated by '-' before the chromosome number
Paracentric inversion	Inversion of a segment of a chromosome confined to one arm
Pericentric inversion	Inversion of a segment of a chromosome composed of part of both arms and the centromere
Pseudodiploid	Cells having 46 chromosomes but with structural abnormalities being present
Tetraploid	Cells having 92 chromosomes (four sets)
Triploid	Cells having 69 chromosomes (three sets)
Trisomy	Three copies of the chromosome, indicated by a '+' before the chromosome number

List of abbreviations of the genes associated with chromosomal anomalies in AML

CBF	Core binding factor gene
CBFB	Core binding factor B
ETO	Eight twenty one gene
EVI-1	Ectropic virus integration gene.
MLL	Mixed lineage leukemia gene.
MYH-11	Myosin heavy chain gene.
NPM	Nucleophosmine gene.
PLZF	Promyelocytic leukemia zinc finger gene.
PML	Promyelocytic leukemia gene.
RARA	Retinoic acid receptor alpha gene.
SMMHC	Smooth muscle myosin heavy chain.

CHAPTER: I

CYTOGENETICS ABERRATIONS