

CHAPTER 5

CONCLUSION

Our study found that the prevalence of subtelomeric rearrangement in patients with idiopathic mental retardation was 6.1%. These findings support to previous reports that G-banded karyotyping is insufficient for detecting clinically significant chromosomal abnormalities, if similar bands are exchanged or if deletions and duplications are smaller than 3-5 Mb. Subtelomeric FISH is effective in detecting cryptic rearrangements and is a useful procedure for patients with idiopathic mental retardation with dysmorphic features. We found that the prevalence of chromosomal abnormalities in autistic children was 3.33%. However, subtelomeric rearrangement may not be a common cause of autism according to previous studies, and was our finding also, according to randomly selective subtelomeric FISH testing in our autistic patients. Due to the technical complexities, time-consuming and cost of screening for subtelomeric rearrangement, using stringent patient selection criteria and high-resolution chromosome analysis should be done first on patients with unexplained mental retardation and/or autism.