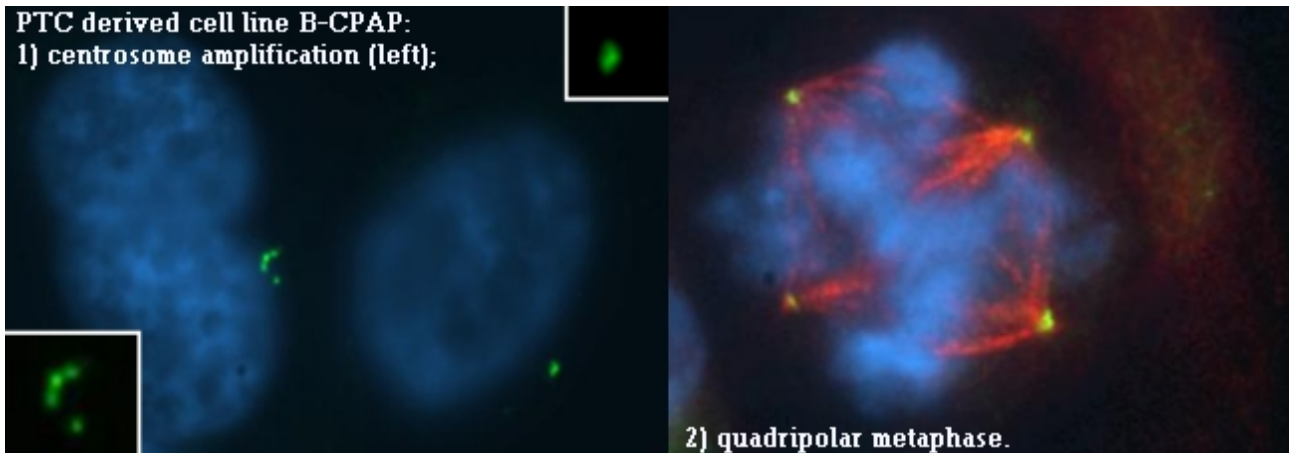


GENETICS

Genomic instability in papillary thyroid cancer cell lines and relative stem like cancer cells



Differentiated thyroid cancer, mainly represented by papillary (PTC) histotype accounts for more than 80% of all thyroid cancers. Chronic autoimmune thyroiditis (AIT) affects up to 10% of the general population, with an incidence increasing over the last decades. An association (5%-48%) between PTC and AIT has been suggested on the basis of clinic-pathological series, but available data are conflicting. The project, composed of a clinical part and an experimental part, is aimed at studying the association between PTC and AIT and at characterizing the tumor-associated lymphocytic infiltration. To investigate the origin of PTC-specific genetic alterations, stem like cancer cells (CSC) from cell lines derived from PTC and from ex-vivo samples of tumors from patients with or without associated AIT will be isolated. I will evaluate mitotic irregularities and chromosome segregation as a function of genomic instability in parental cell lines and derived CSC.

Keywords: PTC, stem-like cancer cells, Genomic instability

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Grants:

MIUR - PRIN 2012 (prot. no. 2012Z3F7HE_002)