Journal of Health and Medical Research

Abstract

Genetic interventions for lipoma

Jisa Elizabath Sabu
Nirmala college of Pharmacy, India

Abstract:
Lipomas are benign soft tissue fatty tumours that most commonly appear in the third decade of life when fatty tissue accumulates. Histologically, lipoma is composed of mature fat cells with a thin fibrous capsule. Simple lipomas account for 80% of adipose tissue tumours. The aetiology may be genetic like Familial Multiple Lipomatosis. Some tumours, like the well differentiated Liposarcomas never metastasize unless they undergo dedifferentiation. They can be introduced as Atypical Lipomatous Tissue, ALT. Southern blot analysis is performed by obtaining DNA from ALT cases were most of them are characterized by the presence of supernumerary ring and long marker chromosomes. The complex chromosome region contains genes MDM2, CDK4, HMGI- C, SAS, GLI, CHOP, OS4 and OSP. Most of ALTs, after analysis revealed amplification of CDK4 and MDM2 proto- oncogenes that play major role in permitting over ride of block operated on cell proliferation. Immunohistochemical results have shown MDM2 overexpression in about 50% of ALTs along with weak CDK4 immunopositivity.

Also the lipomas with Gene fusion transcripts has the expression of certain genes, HMGA2/LPP, HMGA2/RDCI and HMGA2/NFIB. Of these 98% of cases were analyzed for the possible expression of HMGA2/LPP and LPP- HMGA2 fusion genes using reverse transcription polymerase chain reaction. Over all these cases, shows non-enhanced adipocyte apoptosis and enhanced adipogenesis in lipoma tissue. Thus studies provide insights into molecular pathogenesis of lipomatous tumour and representation of distinctive subset of mesenchymal neoplasms with mature adipocyte differentiation.

Key words: Lipoma, Liposarcomas, Lipomatosis, Adipogenesis, Mesenchymal Neoplasms

Citation: Jisa Elizabath Sabu; Genetic interventions for lipoma; Epidemiology Conference 2020; August 10-11, 2020 | London, UK