



Clinicopathologic and genetic correlation of melanocytic tumors – Implication for treatment

Several reports demonstrated the difficulties and lack of agreement in the histopathologic diagnosis of atypical melanocytic tumors (atypical Spitz tumors, atypical blue tumors). These lesions are often included in the broad group of “melanocytic tumors of uncertain malignant potential” (MELTUMP). Several of these tumors were analyzed in a Tutorial organized during the XXIX Symposium of the International Society of Dermatopathology (ISDP) in Graz in 2008. Fifty-seven cases of MELTUMP were classified within 3 groups according to behavior as follows: (a) favourable (no evidence of metastatic disease after a followup of ≥ 5 years); (b) unfavourable (tumor-related death and/ or large metastatic deposits in the lymph nodes and/or visceral metastases); (c) borderline (small nodal deposits of tumor cells ≤ 0.2 mm). There were no significant differences in tumor thickness and presence or absence of ulceration between the different groups. The only 3 histopathologic criteria that were statistically different between the groups of favourable and unfavourable cases were presence of mitoses, of mitoses near the base, and of an inflammatory reaction, all of them found more frequently in cases with unfavourable behaviour. Genetic analyses on a subgroup of these lesions were performed by array comparative genetic hybridization (aCGH). The only recurrent chromosomal aberration was a partial loss of chromosome 9, observed both in cases with favourable and with unfavourable behaviour. The major outcome of this study of a series of “MELTUMPs” suggests as a preliminary observation that these lesions as a group exist and that they may be biologically different from conventional melanoma and benign melanocytic nevi. The terminology remains highly controversial, reflecting the uncertainty in classification and interpretation of these atypical melanocytic tumors. Both histopathologic studies and aCGH results support the concept of a unique group of low-grade melanocytic tumors.