THE SIGNIFICANCE OF HISTOPATHOLOGIC FACTORS OF MALIGNANT SKIN TUMORS IN DERMATOLOGIC PRACTICE

Mirna Šitum, Sanja Poduje, Marija Buljan, Željana Bolanča

Department of Dermatology and Venereology, Sestre milosrdnice University Hospital Center, Zagreb, Croatia

Basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) are the most common types of non-melanoma skin cancer (NMSC) with the incidence increasing globally every year. However, in the last decades, the incidence rates of cutaneous melanoma, one of the most aggressive skin tumors, have also been increasing markedly worldwide. BCC is the most common human malignancy, which presents as a slowly growing, locally aggressive epithelial tumor histologically composed of palisading basaloid tumor cells. There are numerous clinical variants of this tumor and the histologic features to some extent correlate with clinical appearance. BCC extremely rarely metastasizes, usually in cases of large, ulcerated and infiltrative tumors, or with the presence of histologic features such as blood vessel invasion or perineural infiltration. Also, sclerosing or morpheaform BCC is often clinically aggressive and may involve deeper structures, therefore requiring more aggressive therapy. The metatypical BCCs (showing features of both BCC and SCC) are alleged to behave more aggressively. Cutaneous SCC is less common than BCC, however, it represents one of the most common skin malignancies in dermatologic practice. Valuable prognostic factors of SCC included in a routine dermatopathology report are diameter and thickness of the lesion, as well as the level of invasion. Lesions less than 1 cm in diameter have an extremely high cure rate. As the diameter increases, both the risk of local recurrence and distant metastases increase. Perineural involvement and poorly differentiated cells are also unfavorable signs. There are numerous prognostic information available in a routine melanoma histopathology report. Features associated with a potentially worse prognosis of melanoma are increasing Breslow tumor thickness, increasing Clark's level, ulceration, increasing number of mitoses/mm² (mitotic index), vertical growth phase, regression, absence of host inflammatory response, increased tumor vascularity, vascular invasion, neurotropism, marked atypia and satellite metastases.