ABSTRACT BOOK ABSTRACTS



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SKIN CANCER (OTHER THAN MELANOMA)

## IS MAST CELL A KEY PLAYER IN THE PATHOGENESIS OF SEBORRHEIC KERATOSIS AND SQUAMOUS CELL CARCINOMA?

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Introduction: It is reported that mast cell (MC) infiltration and activation are observed around the various types of tumors and speculated that MCs play a key role in its development. Since MCs in cutaneous squamous cell carcinomas (SCC) and seborrheic keratosis (SK) have not been well-investigated, here we focused on the MCs in those tumors.

Objective: We evaluated the number of MCs and their degranulation around SK and SCC. In addition, we checked the expression of stem cell factor (SCF), a well-known growth factor for MCs within the tumors.

Materials and Methods: We evaluated MCs and SCF expression around the SK (14 cases) and SCC (13 cases) by immunohistochemistry for tryptase and SCF.

Results: An intense infiltration of tryptase-positive MCs around the tumor was found both SK and SCC. Degranulated MCs were also detected around the tumors. Interestingly, MCs in SCC seemed to be invaded within the tumors, while MCs in SK immigrated but not invaded around the tumors. Furthermore, SCF expression within the SK was upregulated compared to the marginal lesion of the tumors. In contrast, the expression of SCF seemed not to be affected within the SCCs.

Conclusions: Recently, MCs are highlighted as an important key player in the development of various types of tumors. Our results also suggest that MCs may play important roles in the pathogenesis of different types of skin tumors, i.e. SK and SCC. Furthermore, our current results suggest that SCF can be also deeply involved in the development of SKs. Although we still need to investigate the role of SCF in the pathogenesis of SK and SCC, SCF-MCs interaction might be focused as a novel mechanism of cutaneous tumor development. This interaction could also be utilized for developing a novel treatment for various types of cutaneous tumors.





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