Giant inflammatory myofibroblastic tumor of the breast – case report and review of literature

Vuka Katic1, Dragan Stefanović2, Ljiljana Stefanović2, Ana Jovanović1, Dragan Stošić3 and Marina Vlajković4
1NIS University, Serbia
2Sava Surgery, Serbia
3Clinic for Gynecology and Obstetric, Serbia
4NIS University Institute for Nuclear Medicine, Medical Faculty, Serbia

Introduction: Primary Inflammatory Myofibroblastic Tumor (IMT) of the breast is extremely rare lesion. Only 19 cases have been reported in the English literature. It is an unusual benign tumor that belongs to the family of the benign spindle cell tumors of the mammary. Since Myofibroblastic Tumor (MFT) may show alarming morphologic features which can lead to misdiagnosis of malignancy, especially to spindle cell carcinoma, we have undertaken this study.

Case Report: We report a case of IMT of the breast in a 56 year old female patient who was admitted to our hospital due to a large lobulated lump in the right breast. Mammogram and ultrasound confirmed the solid nature of the tumor, showing a well circumscribed homogenous mobile non-tender lobulated mass, covered by thick capsule. The giant tumor was surgically removed. Macroscopic giant tumor, 8200 g of weight was surgically removed. Gross examination showed a well circumscribed firm white, yellow to grey lobular masses. After conservative excision, there has been no recurrence till now (two years have passed from operation).

Methods: Fifty surgical biopsies, taken from our patient were stained with H&E, Van Gieson, alcian blue-PAS and immunohistochemical abm by using antibodies to EMA, vimentin, desmin and Ki-67. Histopathology showed the lesion consists of a proliferation of spindle cells with the morphological and immunohistochemical features of myofibroblasts, arranged in sheets and short fascicles along with a rich inflammatory infiltrate comprising predominantly plasma cells, admixed with the inflammatory component of lymphocytes and eosinophils. The hallmark of IMT is the significant inflammatory cell component. Mitotic figures were not observed. Histopathologically, the tumor cells were positive for SM-actin, desmin and vimentin.

Conclusion: On the base of literature data (PubMed) and our experience, we have concluded that this neoplasm has the intermediate biological potential; like neoplasm of intermediate biological potential it frequently recurs and rarely metastasizes and clinical physicians should regularly follow up patients after focal resection for IMT.

Biography
Dr. Vuka Katic is professor of pathology in NIS University. She wrote 5 books till now, attended the many world and European congresses, was mentor of many doctor theses and reported more than 500 articles. She was director of Institute of Pathology. For her great success in the pathology, she received a lot of grant; the last is: professor emeritus got in October 2011. Now, she is working in private policlinic "human", in department of pathology.

vuka.katic@gmail.com