

Title: HER-2 Immunohistochemical Expression in Bone Sarcomas: A New Hope for Osteosarcoma Patients.

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Osteosarcoma and chondrosarcoma, remain the most common primary bone tumours. Questions have been raised about the prognostic influence of HER-2 in bone sarcomas, but so far the results have been debatable. We investigated the extent of HER-2 expression in bone sarcomas, and attempted to correlate it with pertinent variables. Fifty-two cases of bone sarcomas (32 osteosarcoma cases and 20 chondrosarcoma ones) were studied for HER-2 immunohistochemical expression. Most of the osteosarcoma cases exhibited membranous staining (78.1%). Strong staining was observed (score 3+) in 34.4%; while 21.9% showed moderate staining (score 2+); and 21.9% displayed weak staining (score 1+), on the other hand, no staining was detected in 7 out of 32 cases (21.9%) (score 0). As regards chondrosarcoma, the absence of staining in all examined cases was noted. Immunohistochemical HER-2 overexpression correlated significantly with osteosarcoma site, with variation relating HER-2 intensity score to the site of osteosarcoma. A statistically significant negative correlation was detected between HER-2 expression and the presence of metastasis at time of diagnosis, A significant correlation was also found regarding HER-2 score and presence of metastasis as more than half of cases with no metastasis at diagnosis (17/28 cases, 60.7%) showed positive intensity score. A statistically significant correlation was detected between HER-2 expression and patients' age. Also, HER-2 expression significantly correlated to histopathological detection of fibrous tissue. Higher scores of HER-2 expression were associated with a significantly better differentiation since detection of wide areas of osteoid were associated with higher HER-2 scores.

Biography

Yasmine Fathy El-Esawy has completed her MD in Pathology at the age of 34 years from Faculty of Medicine, Cairo University. She is a lecturer, Consultant Histopathologist and a member in Cytopathology Unit in Faculty of Medicine, Cairo University. She had about five papers. She is involved in different scientific activities. She was a speaker in Annual Conference of Obstetrics & Gynecology Department, Colposcopy Workshop, Cervical Smear, and in the Clinical Day Of Thyroid Dysfunction Cases (Diabetes, Endocrinology, Metabolism and Clinical Nutrition Unit). She achieved the ISN-ANIO Clinical Nephropathology Certificate Program. She participated in undergraduate and postgraduate education with fullfilment of Basic Medical Education Course.

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