

Total pathological response to metastatic carcinoma or overdiagnosis?

Natalia Ziaja¹ , Maksymilian Kruczała^{2, 3}

¹ Student, Medical College of Rzeszow University, Poland

² Department of Oncology, Radiotherapy and Translational Medicine, Institute of Medical Sciences, Medical College of Rzeszow University, Poland

³ Mrukmed Medical Center in Rzeszow, Poland

The value of histological confirmation of lesions described as metastases in medical imaging.

In 2020, a 37-year-old patient with a painful tumour of the right breast reported to the oncology clinic in Rzeszow. A chest X ray, abdominal ultrasound, mammography (MMG), breast ultrasound, biopsy of the tumour and fine-needle aspiration of the right armpit nodes were conducted. The diagnosis confirmed breast cancer [not otherwise specified (NOS) G2, ER negative, PR negative, HER2 positive (+++), Ki-67 > 20%, c(m)T2N1M0]. The patient was qualified for the neo-adjuvant treatment (petruzumab, trastuzumab, docetaxel, carboplatin).

In 2021, after receiving 6 series of systemic therapy, the patient was qualified for a Madden mastectomy. The postoperative study indicated complete pathological response (ypCR, ypT0N0). Subsequently, the patient was qualified for adjuvant radiotherapy and adjuvant trastuzumab therapy. No genetic mutations were found, however, in 2023, the patient underwent hysterectomy and ovariectomy, and was qualified for treatment with adjuvant zoledronian acid. At the end of 2023,

the patient complained about back pain and was referred for a bone scintigraphy. The study indicated a suspicion of metastasis in the upper right femoral diaphysis and a similar lesion in the distal metaphysis.

A positron emission tomography-computed tomography (PET-CT) was carried out, confirming the result of the bone scintigraphy — suspicion of bone metastases in the right femur. The patient was referred to orthopaedic consultation. An magnetic resonance imaging (MRI) was conducted and indicated a high risk of metastases in the right femur. The oncologist requested a histological confirmation of metastases. A biopsy was performed with no cancer cells in the obtained material. Nevertheless, after another orthopaedic consultation, in 2024 a resection of the right femur was performed. No cancer cells were found in the postoperative material.

The presented case highlights the value of histological verification of lesions suspected to be metastatic in medical imaging. If the patient had been disqualified from histological verification, she would have qualified for unnecessary palliative systemic treatment.

How to cite:

Ziaja N, Kruczała M. *Total pathological response to metastatic carcinoma or overdiagnosis?* NOWOTWORY J Oncol: online first.