

***PALB 2* mutation in a woman with breast cancer : A case report**

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Partner and localizer of BRCA 2 (*PALB2*) was identified as a moderate-risk gene of breast and pancreas cancer. *PALB2* mutations are rare. The prevalence of *PALB2* mutation is now estimated to be 1,7 % in Southern Poland. The absolute risk of breast cancer in women up to 70 years of age with *PALB2* mutation ranges from 33% for women without family histories of breast cancer to 58 % for women with family history. In the present study, one patient with a deleterious mutation of *PALB2* (c.509-510delGA) has been identified. The proband was a 47-years old woman who was admitted to Institute of Oncology because of enlargement of right breast. Contrast-enhanced MRI of the right breast showed a large high dense soft mass lesion in the outer quadrant and center of the right breast with speculated outline measured (10 x 7,5 cm). Moreover, multiple enlarged axillary lymph nodes were visible. Pathological findings were as follows: invasive ductal carcinoma (cribriform type), histological grade 3, an estrogen receptor-positive (ER-positive), progesterone receptor-positive (PgR-positive), and human epidermal growth factor receptor 2-positive (HER2-positive) and an estrogen receptor-negative (ER-negative), progesterone receptor-negative (PgR-negative), and human epidermal growth factor receptor 2-positive (HER2-positive). The proband had mother who was diagnosed with colon cancer at the age of 65 and maternal brother who was diagnosed with gastric cancer at the age of 55 years.

The patient gave written informed consent for the publication of her clinical data.

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