essential for an accurate diagnosis.

Less than 30 cases of primary MCA of the breast have been reported so far with first report dating back to 1998 by Koenig and Tavassoli.2 The immunohistochemical profile has been reported to be typically CK7 (+), CK20 (-), CDX2 (-), GCDFP (-) with triple negative (ER, PR, HER2) expression. In our case, we report an unusual case of MCA of breast showing CK20 positivity. This finding has not been reported previously in the limited cases published on this entity so far. The rarity of this tumor further evokes an interest in this case.

Microscopically, the tumor is characterized by multiple cystic spaces lined by a single/pseudostratified layer of tall columnar cells having basal nuclei showing mild atypia with abundant of intracellular and extracellular mucin. Nodal metastasis is usually absent and this tumor is associated with a favorable outcome, especially when complete resection of the tumor has been achieved.3 In view of rarity of this tumor with close resemblance to MCAs of ovary, pancreas and appendix, a possibility of metastasis from these organs is a subject for debate in the literature and needs to be excluded by a thorough clinico-radiological evaluation.4

Literature reports that patients diagnosed with this tumor are typically postmenopausal women aged between 47 and 96 years.1-10Our patient was 45 years old which is slightly less than that has been reported previously. These patients exhibit triple negative (ER/PR/HER2) phenotype, suggesting that MCAs of the breast develop independently of estrogenic stimulation. This may partly explain for the average age at diagnosis being higher for MCAs than for invasive ductal carcinomas. Ki67 index was additionally high in our case. High Ki67 index along with ER/PR negativity are usually considered poor prognostic factors, however, this tumor is associated with a favorable prognosis even in case of lymph node invasion and patients have been free of recurrence during the follow-up period, especially when complete resection of the tumor has been achieved.2,4

To make a definite diagnosis, a metastatic mucinous cystadenocarcinoma originating from distant organs must be excluded, especially from the ovary. This may depend only on careful inquiry after the clinical history and thorough imaging detection. Additionally, the immunohistochemistry results could also hardly lead to a differential diagnosis since they are often similar to those of an endocervical-like mucinous cystadenocarcinoma of the ovary, and the specific markers for breast cancer such as GATA3, GCDFP-15 and mammaglobin may be completely negative. The most common immunophenotype reported previously was: ER–, PR–, HER2–, CK7+, CK20–; however, the ER or HER2 may be positive. In our case, CK20 was found to be positive. However, on radiology, no mass was found in GIT or