

Facing the frontlines: Early-onset metastatic breast cancer cases in a resource-limited regional emergency department—clinical features and patient presentation

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ABSTRACT

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Breast cancer (BC) is the most common cancer and leading cause of cancer death in Indonesian women (GLOBOCAN 2022). Early-onset BC (≤ 40 years) accounts for 6.6% and is associated with poor prognosis and aggressive metastasis. Managing metastatic BC requires adequate facilities and multidisciplinary care, posing critical challenges in regional settings. We report four cases (2024) at Cilegon Regional Hospital ED; Case 1, 36 yo, Ca mammae T4N3M1 Liver and lung metastasis; Case 2, 35 yo, septic shock + Ca mammae T4N2M1 liver metastasis + Ascites; Case 3, 39 yo, septic shock + Ca mammae T4N2M1 liver and bone metastasis + suspected brain metastasis; Case 4, 27 yo, suspected Ca mammae T4N2M1 liver metastasis + left pleural effusion. Patients showed distinct characteristics; presented de novo advanced disease at first encounter, with a delay 2–17 months due to financial, geographical, and personal factors (body image issues, reproductive function worries, and distrust of medical professionals). Three had a family history of cancer; two with BC, one with ovarian cancer, and histopathological results of IDC NST grade III. Two were HER2-positive with Ki-67 $\geq 50\%$, both with multiple metastases. Delayed treatment worsened conditions, leading to complications such as septic shock, while access to cancer centers was limited by distance, cost, and referral difficulties. Consistent with the literature, Early-Onset BC cases are often diagnosed at advanced stages with aggressive subtypes (HER2-positive/Triple Negative), involving lymphovascular invasion and genetic predisposition (BRCA1/2, CHEK2 mutations). Given the aggressiveness of early-onset BC, education, early detection, and screening must be strengthened for prompt diagnosis and treatment. A multidisciplinary precision medicine approach is necessary, considering patients' QoL productivity and reproductive function, along adequate cancer services and a safe referral system are crucial to ensure comprehensive and holistic care at the regional level, even for patients with poor prognosis.

ABSTRAK

Kanker payudara (KP) merupakan penyebab utama kematian akibat kanker pada perempuan di Indonesia (GLOBOCAN 2022), dengan 6,6% kasus merupakan KP usia muda (≤ 40 tahun) berhubungan dengan prognosis buruk dan metastasis agresif. Penanganannya memerlukan fasilitas memadai dan pendekatan multidisiplin—yang menjadi tantangan di daerah. Dilaporkan 4 kasus tahun 2024 di IGD RS Daerah Cilegon; Kasus 1, 36 tahun, Ca mammae T4N3M1 metastasis hepar dan paru; Kasus 2, 35 tahun, syok sepsis + Ca Mammae T4N2M1 Metastasis Hepar + Ascites; Kasus 3, 39 tahun, syok sepsis + Ca mammae T4N2M1 metastasis hepar dan tulang + suspek metastasis otak; Kasus 4, 27 tahun, suspek Ca mammae T4N2M1 metastasis hepar + efusi pleura sinistra. Kelompok pasien ini memiliki karakteristik yang khas; terdiagnosis stadium lanjut di awal kedatangan, keterlambatan diagnosis 2–17 bulan akibat finansial, geografis, dan pandangan pribadi (isu citra tubuh, kekhawatiran fungsi reproduksi, hingga krisis kepercayaan pada tenaga medis). ketiga pasien memiliki riwayat kanker pada keluarga; 2 KP, 1 kanker ovarium, dengan hasil PA *IDC NST grade III*, 2 diantaranya disertai IHK HER2-positif Ki-67 $\geq 50\%$ dengan metastasis

Keywords:

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multipel. Keterlambatan penanganan memperburuk kondisi sehingga muncul komplikasi syok sepsis, sementara akses ke pusat kanker terhambat jarak, biaya, dan kesulitan merujuk. Sejalan dengan literature, KP usia muda seringkali terdiagnosis pada stadium lanjut dengan subtype agresif (HER2-positif /*Triple Negative*) melibatkan invasi limfovaskular, berhubungan dengan predisposisi genetik (mutasi BRCA1/2, CHEK2) dan profil gen tertentu yang meningkatkan agresivitas tumor. Mengingat agresifitas KP usia muda, edukasi, deteksi dini, dan skrining perlu diperkuat pada kelompok ini untuk memastikan kesempatan diagnosis dan terapi sedini mungkin. Dibutuhkan suatu pendekatan *precision medicine* multidisiplin yang mempertimbangkan QoL, baik dalam produktivitas hingga fungsi reproduksi pasien. Oleh karena itu, pemerataan layanan kanker yang memadai serta sistem rujukan yang aman menjadi krusial untuk memastikan penanganan komprehensif dan holistik hingga ke tingkat daerah, bahkan pada pasien dengan prognosis buruk.