

# Editorial: Assessment of Liver Morbidity in Breast Cancer Patients Receiving Chemotherapy in Suez Canal University Hospitals in Ismailia

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**Background:** In Egypt, breast cancer (BC) is the most common cancer among women, representing 18.9% of total cancer cases and 35.1% of cancer in women. Breast cancer patients receiving therapy require supportive care for the prevention and management of physical and psychosocial adverse effects of cancer and its treatments [1]. Patients who received cytotoxic chemotherapy require careful assessment of liver function both prior to and during therapy. Potential interactions between the liver and chemotherapy fall into two categories: Direct chemotherapy-induced hepatotoxicity & potentiation of preexisting liver disease, especially viral hepatitis [2]. Drug-induced liver injury (DILI) has an estimated annual incidence between 10 and 15 per 10,000 to 100,000

persons exposed to prescription medications. DILI accounts for approximately 10 percent of all cases of acute hepatitis, and it is the most common cause of acute liver failure in the United States [3].

Viral hepatitis reactivation is one of the major challenges encountered during a variety of chemotherapy treatments. In the literature, there is a well-established association between hepatitis B virus (HBV) reactivation and some anti-cancer drugs, especially monoclonal antibodies. On the other hand, there is limited data concerning the reactivation of hepatitis C virus (HCV) with chemotherapeutic drugs and targeted therapies [4].

## SUMMARY OF THE PAPER

The paper entitled “Assessment of Liver Morbidity in Breast Cancer patients receiving chemotherapy in Suez Canal University Hospitals in Ismailia”(page 3). The authors enrolled 88 female patients who received chemotherapy for breast cancer aiming to assess liver morbidity in breast cancer patients before and 3 months after chemotherapy to assess reactivation of viral hepatitis. They performed basic investigations together with Tri-phasic CT abdomen if there were focal hepatic lesions & then 3 months after completing chemotherapy. The chemotherapeutic regimens of each patient were given according to the standard protocol for the specific tumor type.

Viral markers (HBsAg, HBsAb, & Anti-HBcIgG, HCV Ab) were done for all consecutive breast cancer patients who received cytotoxic chemotherapy. They found that Chemotherapy for breast cancer carries high risk for

hepatotoxicity and reactivation of viral hepatitis especially HBV.

## COMMENT ON THE STUDY

The frequency of chemotherapy induced liver morbidity among breast cancer patients is not exactly known but the number of patients in this study is small to achieve clinical significance. The results support the role of chemotherapy in reactivation of viral hepatitis and drug induced hepatotoxicity without stress on the type of chemotherapy that associated with either hepatotoxicity or viral reactivation.

## RECOMMENDATIONS

Multicenter studies are required to determine the exact frequency of liver morbidity after chemotherapy, in breast cancer patients, and proper understanding of the preventive measures that could reduce viral reactivation.

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