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COMPARISON OF TOXICITY AND EFFICACY PROFILE OF FAC AND ACT CHEMO PROTOCOL USED IN TREATMENT OF BREAST CANCER

Introduction:

Breast cancer is among one of the most commonly observed cancer in women. This study was designed to compare two common chemo protocols; FAC which is combination of 5-fluorouracil, Doxorubicin and cyclophosphamide and ACT (Adrymicin, cyclophosphamide and taxane).

Method:

Using a prospective cross-sectional study design, data was collected from 150 hospitalized patients in oncology ward with diagnosis of breast cancer and were currently receiving standard breast cancer-directed treatment using either ACT or FAC in a specialized cancer hospital in Abbottabad Pakistan. Toxicity assessment was done from patients about adverse effects they experienced after treatment and by reviewing pre-post lab tests such as complete blood picture (CP) and liver function test by means of a structured interview technique to fill a questionnaire specifically designed by using standard common terminology criteria for adverse events (CTCAE) v5.0. Efficacy assessment was done by observing survival rate and years of disease-free survival prospectively. Independent T-test was used to compare between patients either receiving TAC or FAC chemo protocol.

Result:

The result showed that 100% of all patients were female with median age of 40. Potential drug interactions were identified in 92% of patients. As per study results, more toxicity was found in ACT treatment protocol arm like anaemia, neutropenia fatigue, pain, insomnia and diarrhoea as compared to FAC protocol. However, an increase in the survival rate and more disease-free survival was observed in patients who had received ACT regimen. It was concluded from this study that ACT chemo protocol is more effective in treatment of breast cancer than FAC. Treating physicians should conduct a risk vs benefit assessment before starting a chemo protocol.