PERIPHERAL NEUROPATHY INDUCED BY CHEMOTHERAPY

MSCC7-0550

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BACKGROUND

Chemotherapy-induced peripheral neuropathy (CIPN) is a common treatment-related side effect of several cytotoxic drugs. Agents known to cause CIPN include platinum analogs, antitubulins (taxanes, vinca alkaloids), proteasome inhibitors (bortezomib), immunomodulatory agents (thalidomide, lenalidomide), and some of the newer biologics (ipilimumab). Its side effects and deficits can impair daily function and diminish quality of life. It can also result in chemotherapy dose reductions or early treatment discontinuation, compromising effective cancer treatment. The long-term sequelae of CIPN have gained more significance since cancer treatment advances have extended survival for many patients, highlighting the importance of monitoring.

PURPOSE

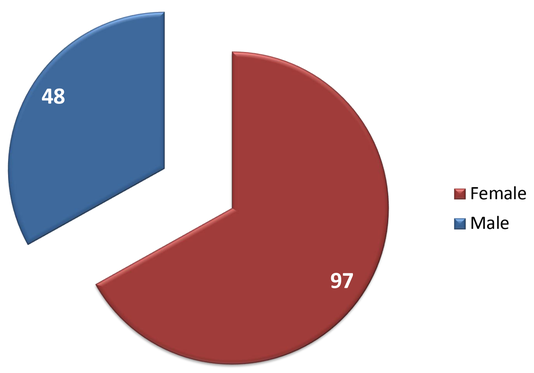
To analyze the prevalence of CIPN in patients with prescriptions of bortezomib, oxaliplatin and paclitaxel in the oncology sector.

MATERIAL AND METHODS

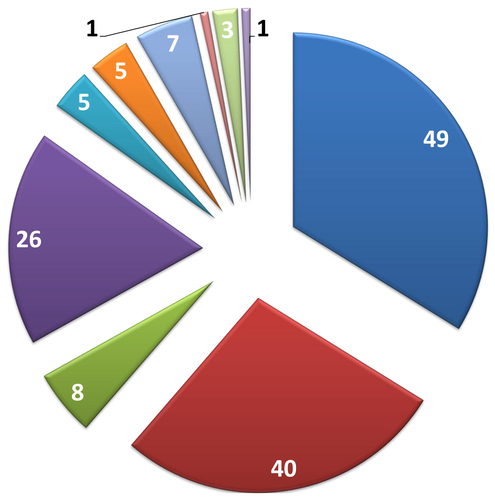
Analysis of the prevalence of CIPN through a descriptive, observational study, with retrospective analysis, conducted between January 2016 and June 2016, in the oncology sector of a general central hospital. Data were collected by hospital records review.

RESULTS

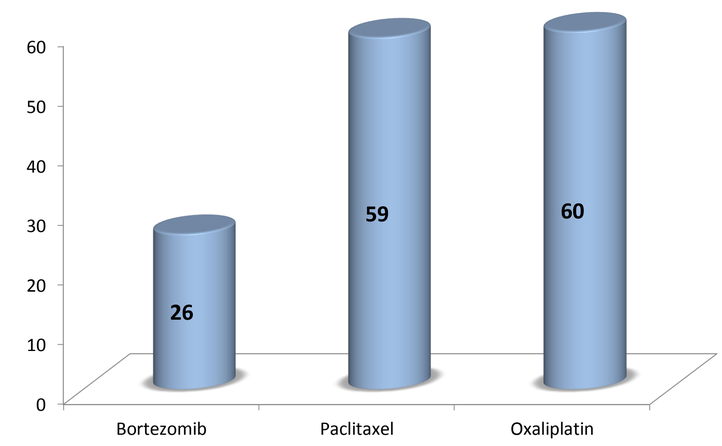
During the study period 146 patients had prescriptions for bortezomib (n=26), oxaliplatin (n=60) and paclitaxel (n=60), the mean age was 64 years (min: 28; max: 86).



Graffic 1: Distribution by sex

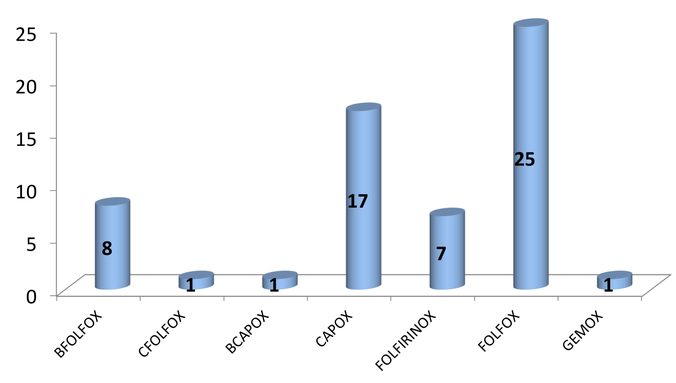


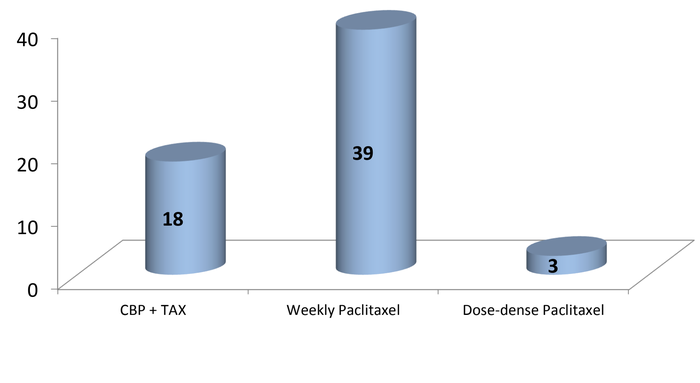
Graffic 2: Distribution by type of cancer

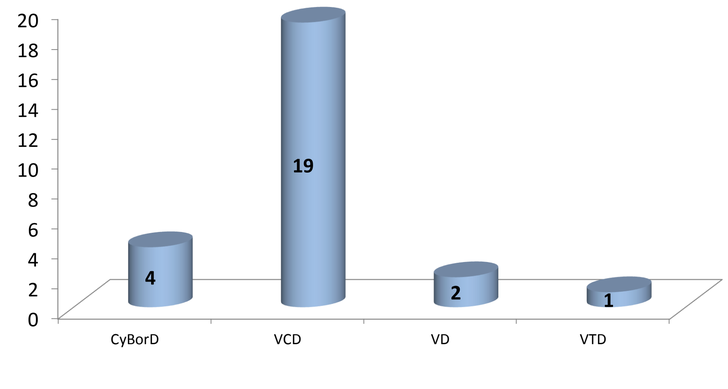


Graffic 3: Distribution by cytotoxic

The majority of patients had colorectal cancer (n=49) and breast cancer (n=40), therefore the most prescribed cytotoxics were oxaliplatin and paclitaxel.







Graffic 4 to 6: Distribution by type of chemotherapy protocol prescribed (oxaliplatin, paclitaxel and bortezomib based chemotherapy)

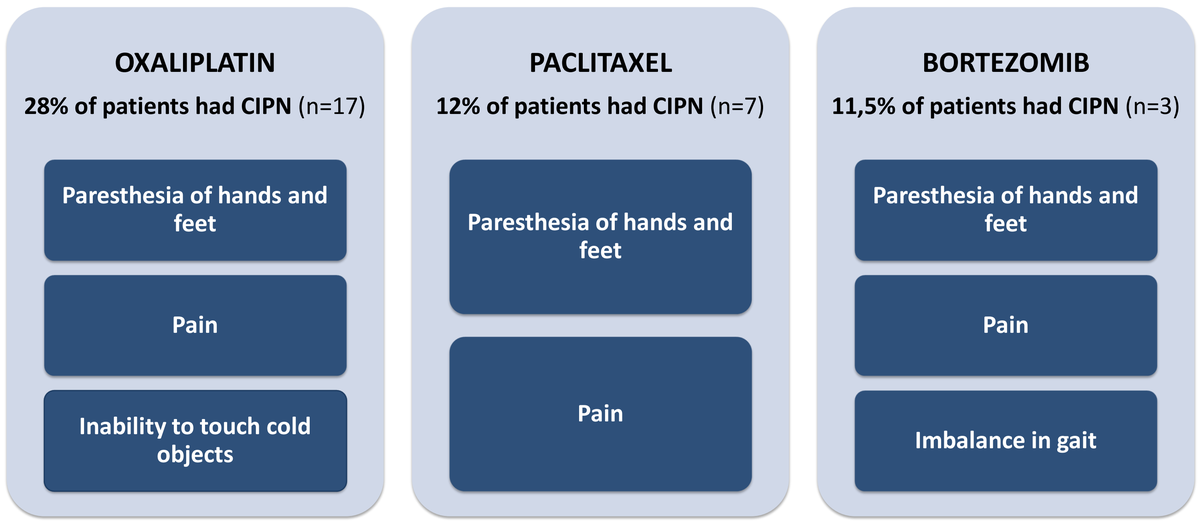


Figure 1: Neurotoxicity symptoms associated to oxaliplatin, paclitaxel and bortezomib referred by patients

- Of the 146 patients included in the study, 22 (15%) had symptoms related to neurotoxicity induced by cytotoxics;
- The majority of patients were on the 5th cycle (min=1; max=9) when symptoms of neurotoxicity were identify;
- Although 18 patients had CBP + TAX protocol, only 2 had neurotoxicity symptoms associated to chemotherapy.

CONCLUSIONS

Although CIPN is a common side effect of cancer treatment, the low prevalence in this study may be underestimated, since we don't have a validated scale to assess it. Nevertheless, we have found that the most frequent signs of CIPN, in this study, were paresthesias of the hands and/ or feet and pain. The early detection of CIPN allows early multidisciplinary interventions, to minimize or reverse the symptoms. Formation and training of the multidisciplinary team to detect and monitor CIPN is important to fully appreciate its impact on patients long-term quality of life. Preexisting conditions, such as diabetes, decreased creatinine clearence, alcohol exposure, should be taken into consideration prior to initiation of potentially neurotoxic agents. The application of a validated scale to assess neurotoxicity is mandatory to analyze the real prevalence of CIPN. It's also important to teach, to instruct and to train the patient in self-assessment of signs and symptoms of neurotoxicity and to characterize it according to interference in daily activities.

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