

## **How to evaluate peripheral neuropathy in oncologic patients.**

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**BACKGROUND:** Chemotherapy-induced peripheral neuropathy (CIPN) is a common adverse effect of cancer therapy, which could result in serious functional loss and limit therapy response. The incidence of CIPN varies depending on the drug, dose and duration of exposure. It is typically dose-dependent and cumulative. Therefore it can induce dose modifications and premature treatment discontinuation. There is no consensus about the optimal methods or questionnaires to assess CIPN, as those methods must be suitable to the individual features related to the drugs, patients and health professional's skills.

**METHODS:** The search strategy was performed in the Scielo (Scientific Electronic Library Online), LILACS (Latin American and Caribbean Health Sciences), EMBASE and PubMed (Medical Literature Analysis) databases from 2005 to 2016, using the following Mesh-terms: "Chemotherapy" AND "Neuropathy" OR "CIPN" AND "Questionnaires" OR "Evaluation" OR "Assessment".

**RESULTS:** Were found 10 studies published among 2005 to 2016. These studies showed aspects related to the age of the patient, the main symptoms of CIPN and chemotherapy drugs that have peripheral neuropathy as adverse effect. Those from, we identified only one method that have been validated. Only four addressed an intervention to minimize or prevent CIPN. However, three did not produce positive results, only two studies have reported positive interventions and contributed to a small but significant improvement in CIPN in patients undergoing chemotherapy. Although this study has sought subsidies for improving the quality of care, it is worth noting the lack of evidence in the literature on interventions focusing on prevention and early diagnosis of CIPN.

**CONCLUSIONS:** The optimal method of assessment CIPN has not been established, but this may be an essential tool to diagnosis and CIPN during treatment monitor. It is considered essential the development of new research to develop strategies for prevention and reduction of occurrence of CIPN. It is planned to continuously review the questionnaire in order to improve our knowledge and applicability. Moreover, it can prevent the progression of CIPN significantly to improve the care provided and quality of life of oncologic patients.