

PHARMACEUTICAL ANALYSIS OF OPIOID PRESCRIPTIONS FOR ELDERLY PATIENTS WITH METASTATIC ONCOLOGICAL DISEASE

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Introduction

According to data from the Brazilian Institute of Geography and Statistics (IBGE), in 2024, the average life expectancy of Brazilians reached 76.6 years¹. This increase reflects the growth of the elderly population, which includes individuals aged 60 and over². At the same time, it is estimated that by 2030, Brazil will record more than 25 million new cases of cancer, with the likelihood of developing neoplasms being three to four times higher among the elderly compared to other age groups^{3,4,5}.

When there is no longer any benefit from curative treatment, the patient may transition to palliative care, where pain management becomes a priority. Part of the decision-making process in analgesia involves choosing the best route of medication administration. The pharmacist can play a role in this moment due to their extensive technical knowledge about the pharmaceutical forms available in stock at the unit^{6,7}.

Material and Methods

After approval from the Research Ethics Committee (CAAE: 78810624.4.0000.5243), metastatic oncology patients admitted during July 2023 to the medical clinic of a high-complexity hospital were identified through electronic medical records. Subsequently, prescriptions that contained opioids were manually separated, and the information was entered into a Microsoft Excel 2013 spreadsheet. Later, the prescriptions of patients aged 60 and over were identified, along with the most prescribed opioid and its most frequent routes of administration.

Results and Discussion

A total of 480 prescriptions containing opioids were identified in the medical clinic in July for the treatment of oncological pain. Tramadol was the most prescribed opioid, appearing in 255 prescriptions. Out of this total, 147 tramadol prescriptions were directed to elderly patients, with 8 prescriptions for subcutaneous administration, 41 for oral administration, and 98 for intravenous administration.

Pharmacological treatment of pain preferably involves oral or transdermal administration for greater patient comfort, increased independence, and improved quality of life⁸.

Patients in palliative care may experience an inability to take oral medications or have difficult venous access; therefore, they are indicated to receive medication therapy via subcutaneous administration⁸. Although it was the least prescribed route, the administration of medications via subcutaneous route, also known as hypodermoclysis, is a practice adopted worldwide in palliative care services⁹.

Table 1: Tramadol prescriptions in oncology patients: relationship between routes of administration and age group.

Age group	Intravenous administration	Oral administration	Subcutaneous administration	Total
over 60 years old	98	41	8	147

Adults aged 18 to 59 years	49	59	0	108
Total	147	100	8	255

Of the 30 patients admitted during the month, 17 are over 60 years old (59%). The average age of patients using tramadol was 61.8 years.

Although the study population is predominantly elderly, the intravenous route of administration was the most frequent, surpassing the oral route. While age is not the only factor associated with complications from intravenous use, studies show that in hospitalized elderly patients, the most common adverse event involves infiltration, obstruction, or phlebitis at the peripheral venous access within 72 hours of puncture¹⁰.

Conclusion

It is evident that, despite a predominantly elderly hospitalized population, most prescriptions did not prioritize the more comfortable routes of administration for this group. The low adherence of the team to the implementation of hypodermoclysis was noted, but it can be suggested as an auxiliary route in some cases. The pharmacist, through the evaluation of opioid prescriptions, can identify the profile of medication use in the target population. Thus, they can contribute by providing targeted guidance to the multiprofessional team on options for alternative routes of administration.

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