ORAL COMPLICATIONS OF CANCER TREATMENT IN PATIENTS WITH BREAST NEOPLASM - A RETROSPECTIVE OBSERVATIONAL STUDY IN AN HOSPITAL SETTING

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Introduction

Anti-cancer therapy and overall managing strategies regarding breast cancer have evolved significantly, thus improving the prognosis.

Nonetheless, the supportive care and management of oral complications is still often disregarded as a concern during the management of breast cancer, often failing to adopt holistic approaches that may increase the patients' quality of life during and after treatment.

The aim of the present study was to analyse and further characterise the main oral manifestations of cancer treatment associated with patients with breast neoplasm and assess if these patients had prior knowledge of these types of complications and if they were receiving treatment for them.

Materials and Methods

A retrospective observational study was carried out.

Records from 32 patients undergoing chemotherapy were retrieved from the files of the Hospital Santos Silva (CHVNG/E) (Vila Nova de Gaia, Porto, Portugal) and reviewed regarding the tumour type, stage and therapeutic regimens.

Patients were subsequently observed and a questionnaire applied. Oral manifestations were determined and a statistical analysis performed using SPSS 21.0.

Results

	N	Percent
in Situ Lobular Carcinoma	3	9.4%
in Situ Ductal Carcinoma	4	12.5%
Invasive Carcinoma Ductal	9	28.1%
Invasive Carcinoma Lobular	9	28.1%
Inflammatory Tumour	1	3.1%
Other	6	18.8%

Table 1:Types of Tumour observed in the study

		Responses	
		N	Percent
Treatments	Chemotherapy	32	78.0%
	Radiotherapy	6	14.6%
	Hormonal	3	7.3%
	Therapy		

Table 2 :Treatments performed on the patients

		Responses	
		N	Percent
Oral Complications	Caries	20	20.4%
	Signs of	13	13.3%
	Mucositis		
	Dysgeusia	26	26.5%
	Smell Disorders	21	21.4%
	Xerostomia	18	18.4%

Table 3 : Oral Complications among the patients

Results and Discussion

- The most common form of breast neoplasm was invasive carcinomas 56.25% (n=18);
- The percentage for invasive carcinoma was higher than that observed in United States, where the overall prevalence is 10% and where invasive ductal carcinoma represents 80% of all forms of invasive neoplasm; the difference between these numbers maybe due to demographical reasons and different social habits. Nonetheless, 3.1% (n=1) of those neoplasm were inflammatory tumours, which is consistent with the prevalence observed in other studies (1-3%)¹;
- Regarding the staging of breast neoplasm, the data gathered presented similarities with a study conducted in Great Britain² where the most frequent stages were Stage I (37.0%) and II (33.4%); as for Stages III (8.5%) and IV (5.6%) they were less observed;
- Dysgeusia, with 81.3% (n=26), and Smell Disorders, with 65.6% (n=21), were the most frequent oral complication detected in the questionnaires. These results are consistent with those observed by Bernhardson³ in Sweden, although the later has reported more cases of Dysgeusia, probably due to differences in therapeutic regimens and also to demographic factors.
- In dysgeusia the most frequent change was in sourly foods with 50% (n=16) followed by salty and sweet foods, 43.8% (n=14) and 37.5% respectively; regarding smell disorders, the most reported change was with body scent 43.8% (n=14), followed by perfume and hospital scent, 34.8% (n=14) and 18.8%(n=6) respectively.
- Xerostomia was reported by 56.3% (n=18) of the patients;
- The patients with complains of xerostomia reported that they self-managed their symptoms: 50% (n=16) chose water and didn't report those symptoms to their doctors or nurses and there was only one case where the patient had been prescribed a spray as well as a gel and ice sickle by the doctors
- Oral mucositis was present in 40.63% (n=13) of the patients;
- Carious lesion was also very frequent, affecting 62.5% (n=20) of the patients;
- FEC (5FU + Epirubicin + Cyclophosphamide) with 46.9% (n=15), AC (Doxorubicin + Cyclophosphamide) with 40.6% (n=13) and Paclitaxel with 37.5% (n=12) were the most used therapeutic regimen and Paclitaxel was the regimen more associated with oral complications;

Conclusion

Patients' awareness for oral complications during breast neoplasm treatment is very low and even undervalued by them.

Dentistry in Portugal isn't part of the National Healthcare Service, which makes the communication between hospitals and private practices very difficult.

More studies on this topic are needed so that the oral health-related quality of life of the oncological patient can be significantly improved.

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3. Bernhardson BM, Tishelman C, Rutqvist LE. Self-reported taste and smell changes during cancer chemotherapy. Support Care Cancer. 2008 Mar;16(3):275-83