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Research Article

Analysis of Non-Scheduled Consultations in Patients with Digestive Neoplasms

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Abstract

Background: Non-scheduled consultation is very frequent among patients with cancer, creating alterations and delays in programmed visits. We describe the incidence of non-scheduled consultations in patients with digestive cancer in our hospital.

Methods: Descriptive, prospective, non-interventional study. In a six-month period (May - December 2017), non-scheduled visits were chronologically recorded in the medical oncology consultation of digestive tumours of Hospital Juan Ramón Jiménez de Huelva. We performed a descriptive analysis of the variables collected through the statistical program G-STAT v.2.0.

Results: Patients with colon or rectal cancer generated most consultations (68,63%), followed by pancreatic (9,15%) and gastric (5,23%). Most patients had metastatic or advanced stage cancer (59,87%) and were under palliative or symptomatic treatment (58,82%). The most frequent reason for consultation was clinical symptoms (47,05%), followed by information demand (18,30%).

Conclusion: Non-scheduled consultations in cancer patients are frequent; they cause interference in scheduled consultations and not always resolved satisfactorily. We propose several measures to reduce the number of non-scheduled consultation in oncology.

Keywords: Digestive Neoplasm; Non-Scheduled Consultation; Advanced Cancer Patient; Tumoral Symptom; Oncological Emergency

Introduction

The demand for unscheduled care from cancer patients is very common at various times of the evolution of their disease [1,2]. These on-demand queries involve alterations and delays in already scheduled queries, and the response they receive is not always satisfactory. Several publications have analysed the causes and characteristics of these demands for assistance and show that the reasons for consultation are very varied and in a large proportion are not classified within those considered true oncology emergencies [2-6].

Cancer patients have an often unpredictable evolution, with un waiting symptoms at various stages of their evolution, which together with the psychological impact of this diagnosis, leads to frequent unscheduled consultations in Oncology services. The human and temporal resources consumed by this type of activity are important. In addition, they are not always resolved satisfactorily. It is important to analyze which patients consult most frequently and what are the reasons for these consultations in order to be able to find solutions to the most frequently detected demands, as well as propose models of care to these patients.

Subjects and Methods

We carry out a prospective, uncontrolled, non-interventionist study of non-comparative analysis of variables.

We consider unscheduled consultations those made by patients who are already attended at oncology visits, but who are made without an appointment scheduled at the time of demand. Queries were included in chronological order and tabulated using the Excel 2017 program. In addition, the medical history number, date, and reason for consultation were found in writing. They were collected

in a pre-established period of 6 months, from May 15 to December 14, 2017 at the Juan Ramón Jiménez Hospital in Huelva, which serves a population of approximately 460,000 inhabitants. Once the consultation collection period is complete, the collection of demographic and clinical data needed to complete the database was completed.

Variables collected in each unscheduled query (analysis unit) included:

- Patient demographics: Age, sex, population of residence.
- Characteristics of tumor pathology: Type of tumor, stage according to the classification TNM 8th edition [7] therapeutic situation of the patient: follow-up, chemotherapy and intention of the same, or patient only in symptomatic treatment.
- Reason for consultation: By clinic related to or not related to the tumor, to obtain information, to obtain a prescription either of a medication or a medical test, for lack of oral chemotherapy, or to change or request an appointment in consultation.
- Resolution: If the reason for the consultation is resolved in whole or in part and it is described whether the patient is referred to other services, to the ER or requires hospitalization.

After collecting the data, we proceed to perform a descriptive analysis of the collected variables, including the occurrence frequencies of each element studied, as well as its percentage with respect to the total frequency after including the data in Microsoft database® office Excel 2017 and using the statistical program G-STAT v. 2.0.

Ethical aspects

The data obtained are in compliance with Organic Law 15/1999, of December 13, Protection of Personal Data [8]. The professionals who have intervened in this study have ensured that the procedures and actions derived from its implementation are in line with the ethical premises and framework established by the current legislation, as well as those established by the Helsinki Declaration and the Standards of Good Clinical Practice.

Results

During the study period, 123 patients demanded assistance, corresponding to 153 unscheduled consultations, as there were 16 patients who consulted on more than one occasion. The total number of visits of patients with digestive cancer made during this period was 2. 353. Unscheduled assistance therefore generated 6.50% of the activity served.

The following is the descriptive analysis of the different demographic and clinical variables collected.

Age and sex: 46.41% of consultations were made by males and 53.59% by women. The average age of the 123 patients treated was 65.36 years, with a typical deviation of 11.25.

Location of residence: 57 patients (46.34%) resided in Huelva, 28 (22.76%) less than 20 kilometres from the capital and 38 (30.89%) more than 20 kilometers away.

Type of tumor: The patients who consulted, the most common by tumor location was the colon with 85 consultations (55.56% of the total), followed by rectum tumors with 20 consultations (13.07%), pancreatic with 14 consultations (9.15%) 8 consultations (5.23%). Other digestive pathologies (16.99%) (esophagus, GIST, neuroendocrine tumors, hepatocarcinoma, cholangiocarcinoma, anal canal, unknown origin), each accounted for less than 5% of consultations. A consultation of a breast cancer patient that is not included in the figure (Figure 1) was also attended.

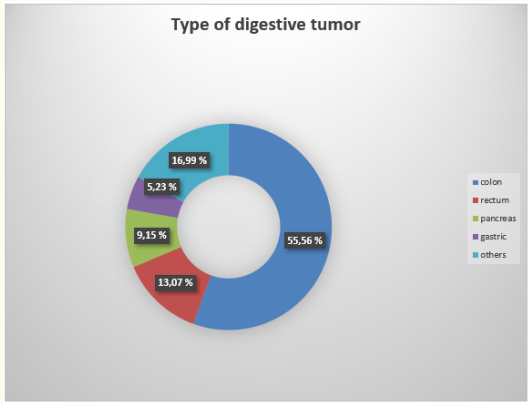

Figure 1: Type of digestive tumor.

Stadium (Figure 2): Tumor staging was in line with the latest published guidelines of the 8th edition of the TMN [7] adding the reseated stage IV category as it is a non-uncommon situation in colo-rectal tumors and with important implications in prognosis and management. The highest number of queries with 86 (56.58%) corresponded to patients with stage IV, followed by stage III with

43 consultations (28.29%), stage II with 9 consultations (5.92%) and iv stage resected 6 consultations (3.95%), advanced non-metastatic with 5 consultations (3.29%) stadiums I with 3 consultations (1.97%).

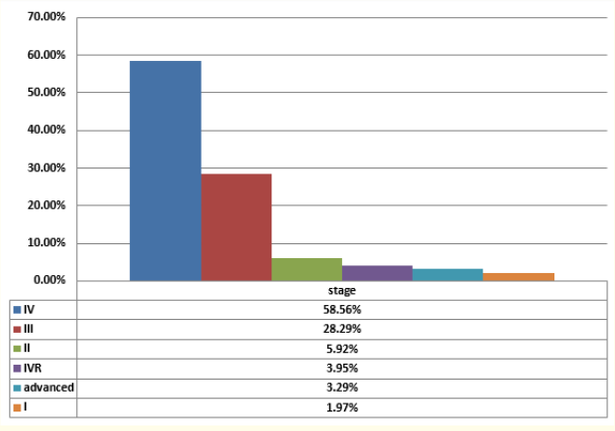

Figure 2: Stage of the patients who consulted.

Type of treatment: They were receiving palliative treatment 90 patients (58.82%), in follow-up 28 (18.30%), in adjuvant or neoadjuvant chemotherapy 34 (22.22%) and with healing intent 1 (0.65%).

Reason for consultation (Figure 3): The most common reason for consultation was the clinic related to the tumor or not: 72 total (47.05%), 47 (30.72%) unrelated to cancer treatment and 25 (16.34%) toxicity of treatments. The second reason in frequency was the demand for information 29 (18.30%). Third, the citation issues were 28 (18.15%). Less often we find: drug prescription application 13 (8.50%) and lack of oral chemotherapy to complete prescribed treatment 11 (7.19%).

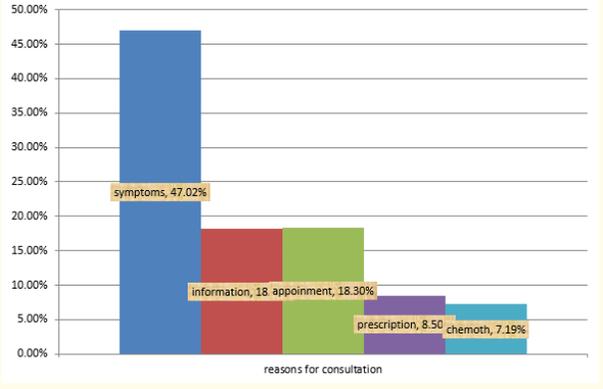

Figure 3: Reasons for consultation.

We appreciate that the largest group of consultations was the one motivated for clinical reasons, with 72 accounted for table 1. Being within this group the most frequent, with 47 consultations, the clinic not related to cancer treatments. The most common reason in this group was the lack of analgesic control (11 consultations 23.40% of consultations for this reason), which was resolved with adjustment or prescription of new medication in 9 of them, although two consulted within a few days requiring further intervention. The second reason for consultation was tumour bleeding with a total of 7 visits (14.89%). Of these, 4 were referred to our hospital's emergency department as the bleeding was considered to be of significant amount at risk and 3 of them required hospital admission. The third cause in frequency was the deterioration of the general condition, which is why they consulted 5 patients (10.63%), 3 of whom were referred to the Palliative Care Unit for evaluation, one required admission for symptomatic control and the other was handled out patiently, improving after adjustment of home treatment. All five patients had advanced tumors and died within 3 months. The same number of consultations, 5, 10.63%, were made for symptoms suggesting possible intestinal obstruction, 4 cases were metastatic colon tumors and a case of pancreatic cancer with peritoneal carcinomatosis. Four of the patients with this clinic were hospitalized, all prior to care at the Emergency Department. The next cause of consultation was fever, fibre, with 4 cases (8.59%), three of which were referred to the ER when meeting possible secondary to neutropenia fever criteria for administered chemotherapy. Two of them found febrile neutropenia and were hospitalized for hospital antibiotherapy. Diarrhoea unrelated to chemotherapy was the cause of consultation in two patients (4.25%). One of which required a second intervention. Two patients attended the infectious clinic without fever, with one being admitted in relation to nosocomial pneumonia. The rest of the 11 consultations per clinic (23.40%) were given a variety of reasons, not requiring entry or consultation in the ER.

Reasons for consultation	Number of queries	No of resolution in consultation
Pain	11	11
Bleeding	7	4
Deterioration	5	4
Obstruction	5	1
Fever	4	1
Diarrhea	2	1
Infection	2	1
Other	11	11

Table 1: Reason and resolution of consultation by unscheduled tumor clinic of patients who consult by clinic not attributable to treatment toxicity (n = 47).

Were common (16.34%) toxicity-motivated toxicity consultations of cancer treatments (Figure 4), with25 total consultations. Toxicity was valued and managed according to SEOM recommendations [9]. The most commonly detected toxicity was diarrhoea with 9 consultations, followed by palm-plantar erythrodisestesia with 5 consultations. The remaining consultations considered due to treatment toxicity were distributed between nausea (3), acute neurotoxicity (2), mucositis (2), asthenia (2), abdominal pain (1) and fever (1).

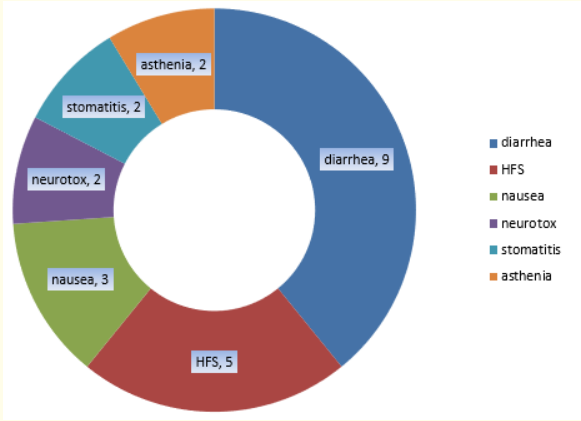

Figure 4: Type of toxicity.

Demand for information accounted for 18.30% of total consultations. The type of information requested mainly concerned the evolution of its cancer process, although there were also consultations for clarification regarding cancer treatments and the management of possible side effects.

Prescription consultations 13 (8.50%) refer to those performed by patients for requiring complementary medication (non-chemotherapy) and also those in which some moratory or imaging test was requested or required to prescribe orthoprosthetic material.

We found that 11 patients (7.19%) who came to consultation for lacking oral chemotherapy needed to complete treatment.

Resolution: In 88.89% of cases (136) an adequate response was given to the demand for assistance. The resolution was partial in 9 cases (5.88%), with 4 patients sent to the palliative care support unit and 2 to surgery and 1 to gynecology. Demand was not resolved in 8 cases (5.23%). During the 6-month follow-up period, 22 of the patients who had consulted died.

With regard to recidivism of consultations, 16 patients out of 123 consulted on more than one occasion, 10 of them on 2 occasions and 6 on more than two occasions, range 2 - 7.

Discussion and Conclusion

The literature on the subject of unscheduled consultations in the oncology specialty is scarce. Most publications analyze consultations in cancer patients globally without limiting the number of tumors [1-5,10,11] with some exception [12]. However, we do not consider that the fundamental reasons for consultation are very different between the different types of tumor pathology, although it is foreseeable that there will be differences in the clinical symptomatology that generates it.

One limitation of this study is not having a patient control group attended at scheduled consultations, so we cannot perform comparative analyses with the overall number of patients served in the consultation. However, the objective of the study was to know the reasons for the consultations and their possible solutions. Given the resource consumption caused by these consultations and interference with scheduled appointments, it's important that solutions focus on the different aspects where patients demand assistance. It should be noted that almost a quarter of patients consulted for administrative reasons, in relation to requests, advances and delays of appointments that did not mostly require the intervention of a doctor when considering administrative tasks.

The most common visits were made by patients who had colon or rectal cancer. We consider that it is due to the high prevalence of this tumor type in the consultation of digestive tumors. According to the 2017 SEOM report of the cancer figures in Spain [13], the prevalence estimate for large bowel cancer was440 per 100,000 inhabitants to 5 years, the third in both sexes after prostate and breast tumors [13]. Second, patients with pancreatic cancer consulted that although it has a much lower incidence and prevalence, it is a highly aggressive and rapidly evolving tumor that generates frequent symptomatology of subacute presentation.

We have not fairies many consultations on in patients who have tumors in metastatic stages or advanced, as these produce more clinical complications and more difficult control. Likewise, patients who consult the most were also expected to be undergoing palliative treatment consisting of chemotherapy or only symptomatic control.

Symptomatology consultations, related to or not related to the tumor, were the most frequent, matching the experiences of other hospitals [1,5,11,14]. This symptomatology was secondary to toxicities of logical onco treatments in 25 cases (16.34%). Cancer patients often seek unscheduled care in situations they perceive as urgent. They often face problems arising from the disease and the effects of treatment at home and do not know whether the symptomatology they afflict can lead to a major complication. Unless it is not uncommon for these symptoms to require medical intervention to resolve, educational interventions to patients can help distinguish the true emergencies of mild clinical conditions that can be adequately treated at home by the patient himself.

As in the literature**,** consulted the most common symptom was cancer pain [2] followed by tumor bleeding, as it is common in gastro-intestinal tract tumors. Lack of medication to complete oral chemotherapy is not a rare situation as many digestive tumors are treated orally and treatments are usually prescribed adjusted to scheduled appointments. Often appointment modifications means that the patient does not have enough medication to finish within the estimated timeframe. It doesn't seem like a major problem, but it is to rule out poor patient compliance or loss of medication or confusion is in polymedicated patients. We found that 18.30%of appointment consultations consisted of demand for information. It must be noted that the ability to assimilate information at times of strong emotional impact, such as the diagnosis of cancer, the need for chemotherapy or the poor evolution of the disease, is limited. On the other hand, the time we have to dedicate to this task is scarcity.

There are several interventions that can be carried out in order to minimize such queries. These proposals are complementary and it is desirable that all proposals be put in place.

Patient education: It is important to spend sufficient time on the first visits to train the patient in the knowledge of the symptoms that are expected depending on the situation of their disease, the type of treatment expected or if the patient is receiving chemotherapy, the most common side effects that may occur and which of these toxicities can be handled by the same patient at home, when to consult with their primary care physician, and when they should suspect a severe complication and should go to a hospital emergency department without delay. The information should be clear, adapted to the patient's situation and supplemented in writing.

Phone inquiries: We have found that not a few consultations refer to doubts about how to perform certain treatments and the importance of certain symptoms or signs, we think that many of them could be resolved by telephone consultation.

Specialized nursing consultation: It is already operational in many services including ours, although its functions remain to be strengthened. Staff should be trained in knowledge for the prevention and control of signs and symptoms of patients undergoing chemotherapy. In the interview, emphasis would be placed on the information provided by the physician regarding the care of the patient in active treatment, how to identify and act on the main toxicities derived from the treatments and would be advised on adequate hygienic-dietary measures according to the patient's situation.

Primary care implication: We consider it essential that the primary care physician of each patient has an extensive knowledge of the cancer process that suffers from it, that has access to the complete hospital medical history and that it is involved in their care. An essential step is that these practitioners have adequate training in Oncology, taking complementary courses in this field. In addition, good communication between physicians and pathways of priority care to the cancer patient when your doctor deems it appropriate is essential. This could lead to early care for the cancer patient in need of care by primary care physicians, without the need for the patient to go to the hospital.

Improvement of emergency services: In our midst and possibly a widespread situation [10,15-18] we find a great reluctance on the part of patients to go to the hospital emergency services because they consider that the care in those units entails great delay both in the interview with the doctor, in the conduct of complementary studies and in the time it takes to receive the discharge or hospital admission. This is especially inconvenient in patients who often have a debilitating disease and that carries limitations in their activity. In our center, a fast track for the care of cancer patients who come to the ER is already underway as a priority. It would be desirable to reduce waiting times in both initial care, results collection and discharge or income. This could be achieved not only by increasing resources in hospitals, but also with a good health education to patients, regardless of their pathology and health status, so that they make rational use of services, focusing primarily on their health center if the clinical situation is not serious or is not really urgent.

Close collaboration with palliative care support units. Support by the palliative care unit in essential in patients with cancer in advanced stages. There are studies that demonstrate better symptomatic control and greater satisfaction of patients and their families when they enter palliative programs at the beginning of the diagnosis of advanced disease [15,19]. Consultation with palliative care units should not be delayed in patients with short-term developments with data suggesting disease progression. Communication between these units and oncology services should be fluid with regular clinical sessions [19-21].

It would be desirable for all oncology services to have a specific consultation to care for patients without an appointment. Although initially an investment, it could be amortized in a short time, avoiding one of the causes of overloading scheduled consultations and emergency services. This consultation may be attended by a nurse and oncologist with as long a schedule as possible.

We conclude that unscheduled consultations of patients with digestive cancer are more frequent than desirable, causing interference with the appointment of scheduled appointments and not always receiving an adequate and satisfactory solution. Most appointments are motivated by clinical reasons that are secondary or not to the treatments received.

There are several measures we can put in place to reduce the number of these consultations or make accommodations within the framework of outpatient care in primary care and emergency services to minimize them and increase the satisfaction and safety of patients and the quality of work of the physicians involved in the process of care for cancer patients.

Conflict of Interest

The authors declare that there is no conflict of interest.

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