## Chapter 7

# Changes in the palliative treatment of patients (dying at home) suffering from nausea and vomiting: consultation by a GP-advisor

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### Introduction

*In general*

In palliative care the statement from M. Balint 'The drug "doctor"', meaning that the doctor herself/himself is a powerful medication, has not lost significance (1,2). Palliative care is more than the right medical treatment for symptoms. Quality of the contact between patient and doctor, sensitivity of the doctor and an ability to anticipate adequately are important factors in determining the comfort of the patient, aspects that are not evident from research. And similarly, the quality of the contact between GP-advisor and the GP seeking advice are key to the efficacy of an advisory service.

A trigger to seeking advice may be a symptom that is overwhelming; if it remains untreated through the doctor's ignorance, the doctor "fails" with consequences for everyone.

We describe how we provide an advisory service when patients have difficult problems, the service evaluation and we discuss ways to improve the quality of palliative care of patients at home.

*Setting: the project*

The region covered by the Comprehensive Cancer Centre North-Netherlands (CCCN), is a predominantly rural area with a population of 2.1 million, about 1000 GPs, 17 hospitals (1 university hospital) and 5500 cancer deaths per year; In 1998-1999, 61% of all deaths occurred at home (3).

Palliative care advice became available to all GPs caring for patients dying at home in our region when four GP-advisors in palliative care were appointed (1 day/week) in September 1999, one in each of the four different sub-regions.

Any GP in the region could telephone the GP-advisor at any time of the day or night (24/7) to discuss a palliative care problem encountered in his/her practice. All telephone advice calls were documented; the consultation service was evaluated by sending a standard questionnaire to the GP after 2-6 weeks, as described elsewhere (4,5). After pain, nausea and vomiting were the second most frequent reason for consultation, with delirium in third place and dyspnoea in fourth.

We were interested in details of nausea and vomiting as a reason for consultation; in the type of treatment used before and after advice was given; in whether the GPs followed the advice given; and whether the GP felt that the advice improved the quality of palliative care given.

## Method

We undertook a retrospective analysis of data that had been prospectively collected on consultations and their evaluations over the year 2003. Every consultation was documented on a standardised form, which consisted of a tick box section for electronic use (quantitative, entered in a data base with SPSS 11,5) and an open section for free text. Characteristics of patients (age, type of cancer, estimated prognosis) needing advice on nausea and/or vomiting were compared with the characteristics of the other patients. Registration forms with nausea and/or vomiting as the subject for advice were individually analysed (IvdV). Details of the forms (questions, medication before the advice, advice about medication, whether or not there was parenteral access, the presence of bowel obstruction and any other advice given) were recorded in tables (in word).

All drugs related to nausea and vomiting and bowel obstruction were included.

Dexamethasone was always included (indications included: co-medication for nausea/vomiting, for raised intracranial pressure, and for neuropathic pain)

Haloperidol was included when doses up to 5 milligram/24 hours were used. Bowel obstruction was also recorded when imminent obstruction, faecal vomiting or "ileus" was reported. Any indication of a parenteral route of administration of fluid or drugs included whether intravenous, subcutaneous, epidural, intrathecal or other (e.g. gastrostomy) routes were established.

Qualitative analysis of advice was categorised as: increased dosage; change in medication; adding medication; rotation of opioid; treating another simultaneous problem; non-pharmacological advice; radical change in treatment: change of most drugs *and* change of route (mostly parenteral instead of oral or by suppository). In some cases advice was classified under more than one category.

Outcomes in terms of inquirer's satisfaction with the consultation on nausea and vomiting were compared with evaluations from other consultations.

## Results

In 2003 there were 572 requests for advice; 483 of these consultations were sought by GPs, and the other 89 consultations were from nurses, pharmacists and others. 128 of the 483 calls from GPs recorded nausea and vomiting as a problem. Six forms were excluded due to incomplete data, resulting in 122 consultations for inclusion in our study.

The mean age of patients with nausea and vomiting (62.2 years; range 2-85yr) was not significantly different from the other patients (63.8 years, range 2-100yr).

Nausea and vomiting were more prevalent in patients with cancer of the gastrointestinal tract (41% N&V) or ovary (73% N&V) than in the patients with other malignancies.

The predicted prognosis of patients with nausea and vomiting was shorter (90% hours/days/weeks) than for other patients (75% hours/days/weeks)

Prior to advice being sought, 51 patients (42%) had no anti-emetic, 58 (48%) had been on a single anti-emetic, 10 (8%) used 2 anti-emetics and 1 (1%) was on a combination of 4 anti-emetics. Following the telephone consultation, one or more anti-emetics were advised for 112 of the patients (93%); in 45 (38%) a single anti-emetic was advised, in 50 (42%) a combination of 2 anti-emetic drugs was advised, 13 (11%) had 3 anti-emetics advised and 4 (3%) had a combination of 4 anti-emetics (table 7.1).

Stopping monotherapy was advised for 10 patients on ondansetron and 6 patients on domperidone. Dexamethasone was advised as a monotherapy in 4 patients, but frequently (in 33 patients) in combination with an antiemetic (metoclopramide, haloperidol or levomepromazine). This was the same for a combination with 3 or 4 drugs (table 7.2).

Advice on the parenteral administration of drugs and fluids was the opening question in 25% of the telephone calls from GPs: 34% of the patients had an

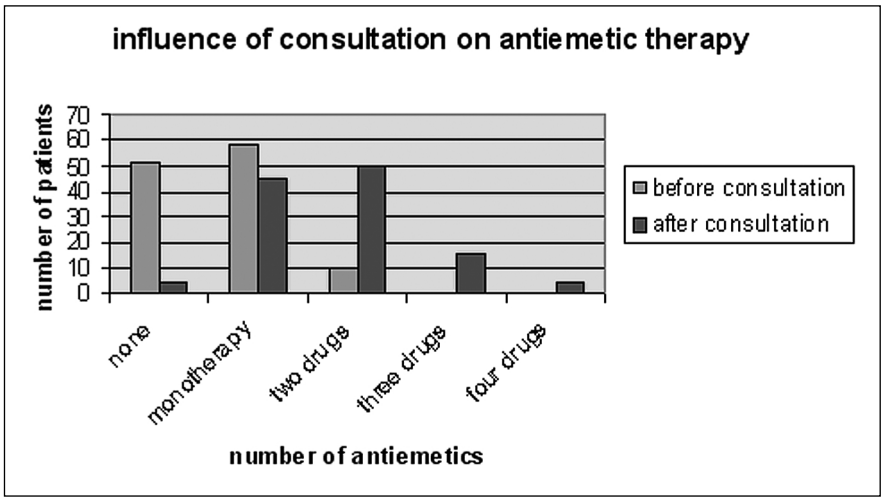


**Table 7.1** Influence of consultation on antiemetic therapy

infusion (subcutaneous, intravenous, epidural or intrathecal) before the consultation. In 46% of the consultations, the advice given was to commence a continuous subcutaneous infusion. In 18% of the cases the patient had (imminent) bowel obstruction. After consultation 72% of the patients had a parenteral route of administration established.

| | **monotherapy** | | **2 drugs** | | **3 drugs*** | **4 drugs** | | **Total patients** |
|---|---|---|---|---|---|---|---|---|
| **before or after consultation** | before | after | before | after | after | before | after | after |
| | n=58 | n=45 | n=10 | n=50 | n=13 | n=1 | n=4 | n=112 |
| metoclopramide | 19 | *7* | 5 | *15* | *7* | 1 | *0* | *29* |
| haloperidol | 10 | *26* | 4 | *32* | *11* | 1 | *4* | *73* |
| cyclizine | 0 | *1* | 0 | *1* | *1* | 0 | *2* | *5* |
| levomepromazine | 4 | *3* | 2 | *6* | *3* | 0 | *2* | *14* |
| domperidone | 6 | *0* | 0 | *1* | *0* | 0 | *0* | *1* |
| dexamethasone | 8 | *4* | 4 | *34* | *12* | 1 | *3* | *53* |
| octreotide | 0 | *1* | 0 | *5* | *2* | 0 | *2* | *10* |
| butylscopolamine | 1 | *3* | 3 | *6* | *3* | 1 | *3* | *15* |
| ondansetron | 10 | *0* | 1 | *0* | *0* | 0 | *0* | *0* |
| prochlorperazine | 0 | *0* | 1 | *0* | *0* | 0 | *0* | *0* |
| | 58 | *45* | 20 | *100* | *39* | 4 | *16* | *200* |

* No patient was on 3 anti-emetics prior to the consultation

**Table 7.2** Therapy before and after consultation

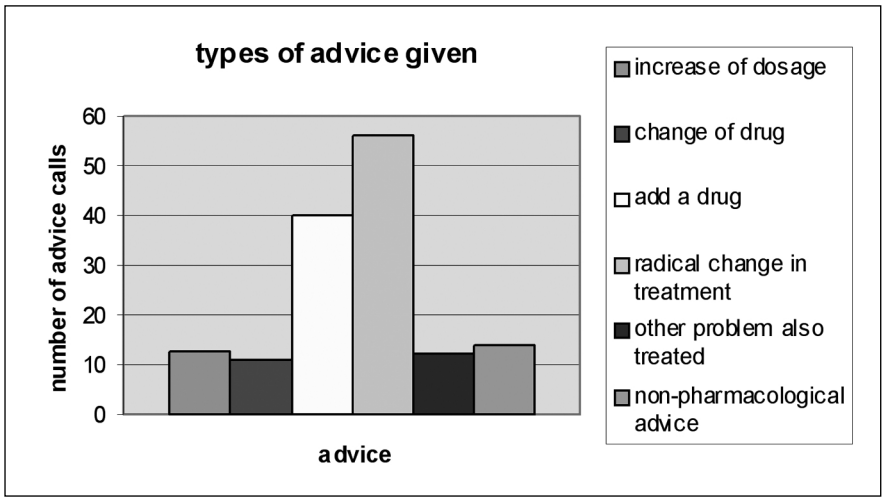


**Table 7.3** Types of advice given

Overall, the advice given most commonly involved a radical change in treatment (both of medication and route), followed by advice on adding a extra drug.

## Evaluation forms

The overall response rate of GPs to the evaluation was 55% (267 of 483), but for the consultations about nausea and vomiting this was 71% (87 of 122).

In 84% (n=298) of the consultations, GPs rated the advice as "very good" on a five point Likert scale when asked about how their enquiry was handled (table 7.4). Another 13% gave "rather good"; no one scored "badly" or "rather badly" and less than 1% scored it as "neutral". The advice was followed in 83% and partly followed in another 10%. 81% of the GPs answered "yes" to the questions on whether the advice had been of value to the patient and whether the quality of palliative care was raised by the consultation.

## Discussion

This is the first time that the type of advice on nausea and vomiting given by GP advisors to their colleagues have been described. In this consultation project, 25% of the problems concerned advice about nausea and vomiting, whereas overall 30-70% of the patients can be expected to experience this symptom (6). This suggests that other patients were managed without help.

| | | **N&V present** N=87 | **no N&V** N= 267 | **Total** (N=354) |
|---|---|---|---|---|
| How was the question responded to? | badly | 0 | 0 | 0 |
| | rather badly | 0 | 0 | 0 |
| | intermediate | 1 | 2 | 3 |
| | rather good | 8 | 38 | 46 |
| | good | 77 | 221 | 298 |
| | missing | 1 | 6 | 7 |
| | total | 87 | 267 | 354 |
| Did you follow the advice? | yes | 75 | 218 | 293 |
| | partly | 7 | 29 | 36 |
| | no | 2 | 8 | 10 |
| | not applicable | 1 | 2 | 3 |
| | unknown | 2 | 10 | 12 |
| | total | 87 | 267 | 354 |

**Table 7.4** Results of the evaluation

The consultations took place as part of the normal work of the GP (the registration forms were not always to hand) often with a need for immediate advice to the requesting GP.

The type of tumour was not recorded in a considerable number of cases. This may have been partly because a common terminal pathway occurred in the last days of life and the type of tumour was less important than the symptoms that needed treatment. It is of note that patients with nausea and vomiting had a shorter estimated prognosis.

Haloperidol was frequently advised as a second step and/or a combination with dexamethasone. After evaluation of the cause of the symptom, this concurs with the advice (step 2) in the literature (7,8 )

Practical considerations may also have played a role as, the small volume and availability of haloperidol (5 mg in 1 ml) was easier to work with than metoclopramide (10 mg=2ml, which often needed 6 ampoules (60 mg)=12 ml/24 hours). Cyclizine is only available as tablets (50mg) or suppository (100mg) in the Netherlands. Levomepromazine is available as tablets (25mg) and injection (25 mg/ml) but is not reimbursed by the insurance schemes.

Many patients had a parenteral route of administration of the medication advised. For the treatment of nausea and vomiting this is theoretically to be expected, as the oral route had often been tried without success.

Differences between GP-advisors were considerable both in the number of consultations and in the advice given. In the evaluation this did not seem to make a difference.

*Example of a radical change in medication*
GP calling GP-advisor: Patient (male 72 yrs) cannot cope anymore, he does not want to live any longer. Known to have metastatic bowel cancer for 3 months. Nauseated all the time, vomiting often small amounts; does not eat or drink anymore. Wants to sleep. Medication: domperidone, metoclopramide and haloperidol variably used. Fentanyl transdermal patch 25 µg/hr. Estimated prognosis: days, maybe weeks. Opening question from the GP: what possibilities exist to relieve the distress? Conclusion: probably imminent or intermittent bowel obstruction

Advice: start with continuous subcutaneous infusion; if no bowel spasms: a combination of metoclopramide 80 mg + morphine 10 mg + dexamethasone 5 mg + midazolam 30 mg; in 24 hours. After a good sleep evaluate how to continue, also depending on the prognosis. If still nauseated 12.5 mg levopromazine can be added subcutaneously.

A radical change of treatment with the start of a subcutaneous infusion brought a capable nurse into the home to support the family, apart from the technical aspects of setting up the subcutaneous infusion. We did not assess this but it probably had a positive influence.

Instead of bringing the patient to the specialist doctor (in a hospital, a nursing home or hospice), telephone consultation allows the necessary knowledge, tailored to the situation, to be available to support the doctor responsible for care. This may be valuable in helping the patient and family, together with their carers, to achieve a good death in the home setting.

Education of GPs in the treatment of nausea and vomiting is necessary because these are common and disturbing problems. As a first choice, ondansetron and domperidone were usually not appropriate.

Future research is needed into medication for the treatment of nausea and vomiting and how palliative care given by GPs can be better supported.

## Conclusion

Consultation of a GP-advisor about problematic nausea and vomiting in patients dying at home supported the patient's own GP in prescribing effective medication via an appropriate route of administration. On evaluation the advice was followed (93%) wholly or in part and valued (80%)

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Idea and supervision Florien van Heest in collaboration with the institute for training of GPs Groningen.

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**Summary**

*Background*
General practitioners with a special interest and with specific training in Palliative Medicine (GP-advisors) supported professional carers (mostly general practitioners [GPs]) through a telephone advisory service. Each telephone call was formally documented on paper and subsequently evaluated.

*Objective*
Data from 2003 was analysed independently to reveal how often and in what way palliative sedation and euthanasia were discussed.

*Methods*
The telephone documentation forms and corresponding evaluation forms of two GP-advisors were systematically analysed for problems relating to the role of sedation and/or euthanasia both quantitatively and qualitatively.

*Results*
In 87 (21%) of 415 analysed consultations, sedation and/or euthanasia were discussed either as the presenting question (sedation 26 times, euthanasia 37 times, both 10 times) or arising during discussion (sedation 11 times, euthanasia 3 times). Qualitative analysis revealed that GPs telephoned to explore therapeutic options and/or wanted specific information. Pressure on the GP (either internal or external) to relieve suffering (including shortening life by euthanasia) had often precipitated the call. On evaluation, 100% of the GPs reported that the advice received was of value in the patient's care.

*Conclusion*
GPs caring for patients dying at home encountered complex clinical dilemmas in end-of-life care (including palliative sedation therapy and euthanasia). They valued practical advice from, and open discussion with, GP-advisors. The advice often helped the GP find solutions to the patient's problems that did not require deliberately foreshortening life.

Keywords: terminal care, voluntary euthanasia, sedation, consultation, general practice