

**REPORT OF SHORT TIME VISIT AT THE
VELINDRE CANCER CENTRE**

**EVALUATION OF APPROACHES AND ATTITUDES TO DYSPNEA
MANAGEMENT IN PATIENTS WITH ADVANCED CANCER
IN PALLIATIVE CARE**

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Introduction

Dyspnea can be one of the most horrible sensations a living creature can experience. In the last decades, advances in palliative care made it possible to ameliorate dyspnea in patients with advanced disease.

During the last decades, the acceptance for the use of opioids to treat pain has increased enormously. The establishment of the World Health Organization (WHO) analgesic ladder¹ helped to establish treatment with analgesic drugs as the mainstay of cancer pain management².

In the management of dyspnea of patients with advanced cancer, the reluctance to use opioids or sedatives seems to remain high. Although there are many treatment options for patients in palliative situations suffering from dyspnea, there are millions of people throughout the world that are distressed by breathlessness.

This project aims at evaluating approaches and attitudes of students and doctors from different educational levels and professions in the management of dyspnea in patients with advanced disease with special focus on cancer patients.

The Velindre Cancer Centre provides closely integrated oncology and palliative care clinical services. In 1998 the centre began the integration of oncology and palliative care. This initially started on one ward where all patients were admitted under the oncologists and were automatically secondarily under the care of the palliative care team. This removed the requirement for individual patient referrals and established completely integrated working. The oncologist remains the primary consultant responsible and the palliative care consultant is the secondary care consultant while the patient is an inpatient.

The cancer centre provides the full range of non-surgical oncological treatments. There are linear accelerator machines for radiotherapy and dedicated in patient and out patient chemotherapy units as well as day treatment facilities. In addition there are facilities and expert care for in-patient end-of-life care and staff committed to providing adequate relief of suffering for dying patients. The centre incorporates programmatic support of family members including children, with a family room in which the patient's bed can be taken, allowing even the sickest young patients the privacy of being with their family in a children-orientated environment with a range of toys etc for every age.

Our centre for haematology and oncology in Vienna offers similar options. There are some differences to be mentioned. In Vienna, we frequently use port-a-caths for i.v. application of Opioids and benzodiazepines, whereas doctors in Cardiff apply the drugs subcutaneously or orally. Almost all Opioids are available as fluids.

The hypothesis of this project is that the students or doctor's response to dyspnea may be related to specialty, education and experience.

The aims of this project are:

- To evaluate the perception of students and doctors about the causes of dyspnea and their frequencies
- To evaluate differences in frequencies of measurements of severity of dyspnea by doctors working in a palliative care facility and other specialties
- To evaluate whether dyspnea measurement scales are used
- To evaluate attitudes of treatment approaches
- To compare differences in approach to dyspnea between students and doctors

3. Target group, methodologies, procedures

3.1. Target groups

- Medical students
- Doctors:
 - Interns
 - Residents
 - Physicians (general practitioners, internists, surgeons, oncologists, anaesthesiologists, radiotherapists, palliative care physicians etc.)

Students/Austria:

Interns/Residents/Vienna

Doctors of other specialities

Medical oncologists

Palliative care physicians

Physicians in a palliative care education program: Cardiff

Time line

- To send out the survey and the case reports and to collect all data, a time frame from September 2008 to June 2009 will be arranged.
- The short time visit at the Velindre Cancer Centre should last three months (October 2008-December 2008).

Methods

During my stay at the Velindre Hospital, the case reports were sent to all other colleagues who are involved in the certificate course and to the registrars and consultants of the palliative care team in Velindre.

Three case reports were described:

Case 1 described acute dyspnea in a patient with stage IV lung cancer, case 2 a breast cancer patient with lung metastases and chronic dyspnea and case 3 a lymphoma patient with progression and acute dyspnea.

Participants were asked to rank following diagnostic procedures:

Oxygen saturation, Read patients chart quickly, Percussion, Electrolytes, ECG, Inspection, Creatin kinase, Ventilatory/Perfusion scan, Blood gas, Echocardiogram, CT-Scan, More blood work, Auscultation, Flow volume loop, Chest-x-ray, Bedside spirometry, Taking patients history, D-dimer, Dyspnea scale

In addition, participants were asked to rank following treatment options:

Psychological support, Oxygen, Fan, Opioids i.v., Opioids p.o., Heparin, Opioids s.c., Nitro, Improve position, Diuretics, Transfusions, Chlorpromazin, Anticholinergic drugs, Promethazin, Antibiotics, Benzodiazepines i.v., Methylxanthines, Benzodiazepines p.o., Benzodiazepines s.c., Corticosteroid, Beta-2-agonists.

Results

Only 10 out of 30 participants replied to the email and completed the survey. All of the consultants and registrars finished the case reports (5).

Case 1

Diagnostic procedures:

The most important diagnostic procedures included taking patients history (ranked 1; 5 persons) followed by reading patients charts (ranked 1; 3 persons). Equally ranked were inspection, flow volume loop and d-dimer (1 person each). All other procedures seemed not as relevant.

Therapeutic procedures

Providing O2 and a fan (ranked 1; 3 out of 10, each) seemed to be the most important procedures in this group followed by improving position (ranked 2; 2 out of ten). Oral opioids were the drug mentioned most often (ranked 3; 5 out of 10).

Case 2

Diagnostic procedures:

The most important diagnostic procedures included again taking patients history (ranked 1; 5 persons) followed by reading patients charts (ranked 1; 3 persons). All other procedures were ranked later on.

Therapeutic procedures

Providing corticosteroids (ranked 1; 5 out of 10, each) was the most important drug in this group followed by psychological support (ranked 1; 2 out of 10). The only other drug mentioned were oral opioids (ranked 1; 5 out of 10).

Case 3

Diagnostic procedures:

The most important diagnostic procedures included taking patients history (ranked 1; 6 out of 10) followed by reading patients charts (ranked 1; 4 persons). All other procedures seemed not as relevant.

Therapeutic procedures

Providing O2 (ranked 1; 3 out of 10) seemed to be the most important procedure in this group. Subcutaneous opioids were the drug mentioned most often (ranked 3; 4 out of 10).

Conclusion

The most important diagnostic procedure seemed to take the patients history, although the patient might be out of breath. Opioids were mentioned in first line treatment, but not as often as they could be used.

Outlook

During my stay in Cardiff, I could arrange several appointments to provide further questionnaires:

- Students/Austria: Spring 2009, about 400
- Interns/Residents/Vienna: 45 participants, completed
- Doctors of other specialities: AKH Vienna: cases will be provided soon and recollected until January 31st
- Palliative care physicians: 25, completing a course in Germany
- Physicians in a palliative care education program: about 50, completing a course in Vienna