

DEPRESSION IN CANCER PATIENTS

Maria Die Trill, PhD

Coordinator, Psycho-Oncology Unit

Hospital Universitario Gregorio Marañón

Madrid, Spain

ANXIETY AND DEPRESSION IN CANCER PATIENTS

- **The prevalence of anxiety and depression in patients with cancer has been reported to be on average 25%**
- **They significantly affect patients' quality of life**
- **They generally remain underdiagnosed and undertreated in the cancer population as well as in other medical illnesses¹ despite the great degree of suffering they impose on cancer patients**

¹ Gregory et al., General Hospital Psychiatry, 1992; 14:36-42

NORMAL REACTIONS TO CANCER

- A characteristic emotional response to cancer includes:
 - Initial shock and disbelief
 - Confusion with symptoms of anxiety and depression:
 - irritability
 - altered appetite and sleep patterns
 - difficulty to concentrate
 - Difficulty in carrying out usual daily activities
 - fears about the future
- Symptoms begin to resolve after several weeks with family and social support as well as with the outline, by the oncologist, of a treatment plan that offers hope and reduces part of the uncertainty

NORMAL REACTIONS TO CANCER

However, multiple losses, beginning with the loss of one's health upon cancer diagnosis (followed by loss of: body image, professional role, family roles, social roles, loss of abilities and capacities, etc), result in grief reactions and sadness that often accompany the cancer patient throughout the disease process.

ANXIETY AND DEPRESSION IN CANCER PATIENTS

- Anxiety and depression may persist in time, non-adaptively, requiring specialized attention and/or treatment
- Both may be present although only one may predominate
- Because they are different clinical entities, they will be dealt with separately in this presentation

DEPRESSION IN CANCER PATIENTS

According to WHO:

- Depression is considered one of the most common psychiatric disorders in the world, affecting over 120 million people worldwide
- Depression is among the leading causes of disability worldwide
- Fewer than 25% of those affected have access to effective treatments despite the fact that it can be reliably diagnosed in Primary Care Settings
- At its worst, depression can lead to suicide, a tragic fatality associated with the loss of about 850.000 lives every year

DEPRESSION IN CANCER PATIENTS

PREVALENCE

- Reported prevalence rates of depression among cancer patients can be as high as 38% for major depression and 58% for depression spectrum syndromes¹
- Differences in reported prevalence rates are due to differences in assessment methods, as well as differences in stage and tumor site, among others

¹Massie MJ, J Natl Cancer Inst Monogr 2004 (32):57-71

DEPRESSION IN CANCER PATIENTS

PREVALENCE

Authors	Cancer Site Sample Size	Diagnostic Method	Affective Disorders	Adjustment Disorders
Derogatis et al., 1983, JAMA	Mixed 215	DSM-III (Diagnostic Manual of Mental Disorders – III Edition)	6%	32%
Grassi et al., 1989, Gen Hosp Psych	Mixed 196	Hamilton Rating Scale for Depression+Illness Behaviour Questionnaire+Interview HADS (Hospital Anx & Depression Scale)	26%	46%
Razavi et al., 1990, Brit J Psych	Mixed 128	DSM-III HADS	26%	46%
Prieto et al., 2002, JCO	Hematology 220	DSM-IV	13.2%	22.7%
Kissane et al., 2004 Aust NZJ Psych	Early & advanced breast cancer 503	DSM-IV	8% (advanced) 11.9% (early)	23% (advanced) 24.8% (early)

Based on Grassi L and Uchitomi Y
www.ipos-society.org/education

DEPRESSION IN CANCER PATIENTS

Prevalence by Cancer Site	
Pancreas	33% - 50%
Oropharynx	22% - 57%
Breast	13% - 46%
Lung	11% - 44%
Colon	13% - 25%
Gynecological	12% - 23%
Lymphomas	8% - 19%
Gastric	11%

DEPRESSION IN CANCER PATIENTS

RISK FACTORS

- Young age
- Personality factors (pessimism, tendency to repress feelings such as anger)
- Social isolation and lack of support
- Poverty
- Previous negative experience with cancer in the family or personal experiences of physical illness
- Advanced disease (metastatic or terminal illness)
- Physical deterioration
- Tumor location (lung, pancreatic, head and neck)
- Presence of physical symptoms from cancer, especially if not well controlled
- History of multiple losses
- Previous psychiatric disorders, especially episodes of major depression or suicide attempts
- History of substance abuse

THE DIAGNOSIS OF DEPRESSION IS A CHALLENGE IN THE CANCER SETTING

- Depressive symptoms occur along a spectrum that ranges from sadness to major affective disorder
- Mood change may be difficult to assess in a patient who feels his life threatened by disease
- Diagnosis of depression in physically healthy individuals depends heavily on the presence of somatic symptoms (anorexia, fatigue, insomnia & weight loss).

Somatic symptoms are indicators of little value in cancer patients: they are common to cancer and depression

MAJOR DEPRESSIVE EPISODE: DIAGNOSTIC CRITERIA (I)

- A) At least 5 of the 9 symptoms below for the same 2 weeks or more, most of the time almost every day, and this is a change from his prior level of functioning. One of the symptoms must be either (a) depressed mood, or (b) loss of interest:
- a. Depressed mood
 - b. Loss of interest or pleasure in most or all activities
 - c. Weight loss or gain
 - d. Insomnia or hypersomnia
 - e. Agitated or slowed down behavior
 - f. Feeling fatigued or reduced energy
 - g. Thoughts of worthlessness or extreme guilt (not about being ill)
 - h. Reduced ability to think, concentrate or make decisions
 - i. Frequent thoughts of death or suicide

MAJOR DEPRESSIVE EPISODE: DIAGNOSTIC CRITERIA (I)

- B) Symptoms don't indicate a mixed episode
- C) Symptoms cause great distress or difficulty in functioning at home, work or other
- D) Symptoms are not caused by substance use (alcohol, drugs) or a medical condition
- E) Symptoms are not due to normal grief for the loss of a loved one; they persist for more than 2 weeks, or they include great difficulty in functioning, frequent thoughts of worthlessness, thoughts of suicide, psychotic symptoms, or psychomotor retardation

DEPRESSION IN CANCER PATIENTS

DIAGNOSIS

Four approaches have been described in the assessment of depression in the medically ill:

- 1) INCLUSIVE APPROACH: Counts all symptoms of depression, whether or not they may be secondary to physical illness. High sensitivity, low specificity; does not focus on etiology
- 2) ETIOLOGIC APPROACH: Counts a depressive symptom only if it is presumed not secondary to physical illness

DEPRESSION IN CANCER PATIENTS

DIAGNOSIS

- 3) EXCLUSIVE APPROACH: Eliminates symptoms such as anorexia and fatigue, which can be secondary to cancer, and employs other depression criteria. Increases specificity, lowers sensitivity which may result in lower prevalence and underdiagnosis

- 4) SUBSTITUTIVE APPROACH: Replaces indeterminate symptoms such as fatigue (frequently secondary to physical illness) with cognitive symptoms such as indecisiveness, brooding and hopelessness¹

Cohen-Cole SA *et al.*, Diagnostic Assessment of Depression in the Medically Ill. In: Stoudmire A & Fogel B (eds) Psychiatric Care of the Medical patient. New York, Oxford University Press, 1993, 53-70.

¹Endicott J, Cancer 1984, 53: 2243-2248

DEPRESSION IN CANCER PATIENTS

DIAGNOSIS

- The diagnosis of depression in the oncology setting should depend on psychological not somatic symptoms, in cancer patients:
 - dysphoric mood,
 - feelings of helplessness and hopelessness,
 - loss of self-esteem,
 - feelings of worthlessness or guilt,
 - anhedonia,
 - thoughts of wishing for death or suicide¹

¹Massie MJ *et al.*, Handbook of Psycho-oncology: Psychological Care of the Patient with Cancer, New York, Oxford University Press, 1989; 273-282

DEPRESSION IN CANCER PATIENTS

IMPORTANT DIAGNOSTIC CONSIDERATIONS

In order to design effective treatments differential diagnosis should include:

- Normal reactions to illness and loss
- Adjustment disorders with depressed and/or anxious mood
- Determine whether organic factors underlie the depressive syndrome: the evaluation of every depressed cancer patient must consider medical, endocrin, metabolic and neurological factors

Depressive syndromes caused by the direct physiologic effects of cancer are called MOOD DISORDERS DUE TO A GENERAL MEDICAL CONDITION

MOOD DISORDERS DUE TO A GENERAL MEDICAL CONDITION

DIAGNOSTIC CRITERIA*

- A) A person has significant disturbance in mood that includes either (or both):
 - Depressed mood or significantly reduced level of interest or pleasure in most or all activities
 - Mood that is euphoric, heightened or irritable
- B) The person's symptoms are directly related to the presence of a medical condition (which should be identified)
- C) Another disorder does not better explain the mood disturbance
- D) The mood condition is not present only when a person is delirious
- E) Symptoms are a cause of great distress or difficulty in functioning at home, work or other important areas

* American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders – IV Edition, Text Revised, 2003

MEDICAL CONDITIONS ASSOCIATED WITH DEPRESSION IN CANCER PATIENTS

<p><u>ENDOCRINE ABNORMALITIES</u></p> <p>Cushing's Disease Addison's Disease Diabetes Mellitus Hypopituitarismo Thyroid dysfunction (hypo or hyperthyroidism)</p>	<p><u>INFECTIONS</u></p> <p>Epstein-Barr virus Encephalitis HIV Influenza Pneumonia Syphilis Hepatitis</p>
<p><u>MEDICATIONS</u></p> <p>Steroids Interferon Interleukin 2 Barbiturates Propranolol</p> <p>Methyldopa Reserpine Some antibiotics Some chemotherapy agents (Vincristine, L-Asparaginase, Procarbazine, Vinblastine)</p>	<p><u>ONCOLOGICAL DISEASES</u></p> <p>Tumors of the SNC Lung Cancer Pancreatic Cancer Lymphoma Leukemia</p>

MEDICAL CONDITIONS ASSOCIATED WITH DEPRESSION IN CANCER PATIENTS

NEUROLOGICAL DISORDERS

Cerebrovascular Diseases
Huntington's Disease
Alzheimer's Disease and other forms of Dementia
Parkinson's Disease
Multiple Sclerosis
Subarachnoid Hemorrhage

METABOLIC DISORDERS

Hyponatremia
Hypokalemia
Hyperkalemia
Folic Acid Deficiency
Pellagra
Uremia
Wilson's Disease

OTHER MEDICAL CONDITIONS

Systemic Lupus Erythematosus
Rheumatoid Arthritis
Alcoholism
Uncontrolled Pain
Anemia
Hypertension

PSYCHOMETRIC INSTRUMENTS IN THE MEASUREMENT OF DEPRESSION

- Beck Depression Inventory¹
- The Hospital Anxiety and Depression Scale (HADS)²
- The Brief Symptom Inventory- 18 (BSI-18)- Depression Subscale³
- Profile of Moods State – POMS⁴
- The Distress Thermometer (DT)⁵

¹ Beck A, Depression Inventory, Philadelphia, PA, Center for Cognitive Therapy, 1961

² Zigmond AS *et al.*, Acta Psychiatr Scand 1983, 67 (6):361-370

³ Derogatis LR & Melisaratos N, Psychological Medicine, 1983, 13:595-605

⁴ McNair D. *et al.*, Education and Industrial Testing Service, San Diego, CA. 1971

⁵ Holland J & Bultz B, National Comprehensive Cancer Network, 2007;5:3-7

MEASUREMENT OF DEPRESSION IN CANCER PATIENTS

A single-item question:

“Have you been depressed, most of the day, nearly every day, for the past two weeks or more?”

was able to identify all cancer patients diagnosed as depressed using the **Research Diagnostic Criteria**

BIOLOGICAL MECHANISMS UNDERLYING DEPRESSION

- Vast literature showing the association between depression and an increase in pro-inflammatory cytokines (e.g., interleukin-1, interleukin-6, and tumor necrosis factor alpha)
- Cancer itself and its treatment (medications and surgery) in general can be responsible, together with the individual stress response, for the production of pro-inflammatory cytokines which may contribute to the development of depressive symptoms

CONSEQUENCES OF DEPRESSION IN CANCER PATIENTS*

- Increased length of stay in hospital¹
- Maladaptive coping and abnormal illness behavior²
- Reduced adherence to treatment³
- Reduced efficacy of chemotherapy in breast cancer patients⁴
- Reduced quality of life⁵
- Increased psychosocial morbidity withinin the family
- Complicated family relations and patterns of communication within the family
- Increased risk of suicide⁶

*Grassi L. *et al.*, 2005, *Advances in Psychiatry*, 2005; 2:59-66

¹Prieto JM *et al.*, *J Clin Oncol* 2002; 20:1907-1917

²Grassi L. *et al.*, *Psycho-Oncology*, 1993; 2 (1): 11-20

³Diamate *et al.*, *Arch Intern Med* 2000; 160:2101-2117

⁴Walker LG *et al.*, *British Journal of Cancer* 1999; 80: 262-268

⁵Parker KP. *et al.*, *Health and Quality of Life Outcomes*, 2003:1-68

⁶Hem E. *et al.*, *J Clin Oncol* 2004; 22: 4209-4216

CANCER AND SUICIDE: **A CLINICAL VIGNETTE**

Mary is a 19 year old diagnosed with treatment-resistant lymphoma.

Treatment protocols have been unable to achieve periods of prolonged remission. Her condition is terminal, although death is not imminent.

When she is not in remission she suffers intense uncontrolled pain. The amount of analgesia required to control her pain leaves her “...too drugged to do anything” according to her.

During her last hospitalization she mentioned ending her life if she had further uncontrolled pain episodes in the future.

She appears in the outpatient clinic today without previous appointment. She looks for various staff members who had cared for her to thank them. As she gives a few personal belongings to staff members to whom she felt close, one of them realizes that Mary has enough analgesic medication at home to end her life.

What actions would you take?

CANCER AND SUICIDE: A CLINICAL VIGNETTE

- 1) Empathize with patient
- 2) Validate patient's feelings: "Many cancer patients have transient thoughts of suicide or desire death, especially if they feel hopeless"
- 3) Maintain a supportive therapeutic relationship
- 4) Adequate pain control (and other physical symptoms)
- 5) Assessment of current emotional state:
 - Is the patient depressed? Is there a wish to have ultimate control over intolerable symptoms? Is suicide an alternative to suffering?

CANCER AND SUICIDE: A CLINICAL VIGNETTE

- Psychiatric history:
 - Previous depressive episodes? Suicide attempts? Suicide in family?
- Is there a defined **PLAN, INTENTION** and what is the **VIABILITY** of such plan? (24-hour companion if needed)
- What has kept the patient from committing suicide?
- What are the patient's support systems?
 - What type of family, social relationships does she maintain?
- What are the patient's belief systems?

CANCER AND SUICIDE: A CLINICAL VIGNETTE

- What is her sense of meaning in life?
- What meaning do death and pain have for the patient?
- What are the patient's interests in life?: Help maximize values
- Convey that things can be done to improve the quality of life even in the context of a poor prognosis
- Involve and evaluate patient's family

CANCER AND SUICIDE

- Suicide has been reported to be 1.5-2 times higher in cancer patients than in the general population¹
- Among terminally ill patients with cancer the request for euthanasia is about 4 times higher in patients with depression than in those without depression²
- Desire for death in terminally ill cancer patients is frequent, and has been shown to be associated to depression and is transitory³

¹ Hem E. *et al.*, J Clin Oncol 2004; 22: 4209-4216

² Van der Lee ML, *et al.*, J Clin Oncol 2005; 23:6607-6612

³ Chochinov HM *et al.*, Am J Psychiatry 1995;152:1185-1191

SUICIDE RISK FACTORS IN CANCER PATIENTS

RISK FACTORS

- Family/personal history of suicide or suicide attempts
- Psychiatric history:
 - Delirium, depression with hopelessness, psychotic features, irrational thinking, loss of control and impulsivity
- Uncontrolled pain or other symptoms, advanced disease
- Cancer site (head & neck, lung, gastrointestinal)
- Poor social support
- Older age
- Gender: Males

DEMORALIZATION SYNDROME IN CANCER PATIENTS

DIAGNOSTIC CRITERIA

- Affective symptoms of existential distress including hopelessness or loss of meaning and purpose in life
- Pessimism, helplessness, a sense of being trapped, personal failure or lacking a worthwhile future
- Absence of motivation to cope differently
- Associated features of social alienation or isolation and lack of support
- These phenomena persist for more than two weeks, with fluctuation in emotional intensity
- A major depressive episode or other psychiatric disorder is not present as the primary condition

DEMORALIZATION SYNDROME IN CANCER PATIENTS

Occurs in at least 20% of patients who do not meet DSM-IV criteria for the diagnosis of a mental disorder

TREATMENT OF DEPRESSION IN CANCER PATIENTS

Combination of:

- Control or elimination of potential organic causes of depression when possible
- Psychotherapy
- Pharmacotherapy
- Working with the patient's family and staff members

PSYCHOSOCIAL TREATMENT FOR DEPRESSION IN ONCOLOGY

- Adjust psychotherapeutic modality to patient's needs and disease stage
- Crisis-intervention models involving an active therapeutic role
- Educational interventions: Clarifying information, explaining emotional reactions to patient and family
- Cognitive techniques to help correct misconceptions and exacerbated fears

PSYCHOSOCIAL TREATMENT FOR DEPRESSION IN ONCOLOGY

- Interventions directed to enhance the spiritual aspects in advanced disease and dying¹
- Interventions designed to maintain patients' dignity²
- Cognitive-Behavioral Interventions³
- **GROUP THERAPIES:** Supportive-Expressive Group Psychotherapy⁴; Cognitive-Existential Group Therapy⁵; Multidimensional structured group psychotherapy⁶

¹ Breitbart W., Support Care Cancer, 2002; 10(4):272-280

² Chochinov HM *et al.*, J Clin Oncol, 2005; 23 (24): 5520-5525

³ Greer S. *et al.*, British Medical Journal, 1992; 304 (6828):675-680

⁴ Spiegel D, Spira J. 1991. Supportive Expressive Group Therapy: A Treatment Manual of Psychosocial Intervention for Women with Recurrent Breast Cancer. Psychosocial Treatment Laboratory, Stanford University School of Medicine: Palo Alto, CA.

⁵ Kissane DW, *et al.*, J Clin Oncol, 2004; 22(21): 4255-4260

⁶ Fawzy FI, *et al.*, Archives of General Psychiatry, 1993; 50(9):681-689

PHARMACOTHERAPY FOR DEPRESSION IN THE CANCER SETTING: General Rules

CHOOSE THE DRUG DEPENDING ON:

- Which is the safest drug or which has the fewest side-effects for the cancer patients
- What the characteristics of the depressive episode are
- Which is the best way of administration for a particular patient (pills vs. liquid vs. parenteral)
- The most recent scientific advances in the treatment of depression

PHARMACOTHERAPY FOR DEPRESSION IN THE CANCER SETTING: General Rules

- Start dose according to patient's condition (usually half dose for a few days, then titrate)
- It would be important to wait for the effects of the drugs (latency: usually 4 weeks)
- Provide continued treatment for 6-9 months (more if depression or depressive episode are recurrent)
- Discontinue gradually by tapering the dose and follow-up
- Monitor on a continued basis to watch for potential drug interactions that may occur between antidepressants and certain chemotherapeutic agents

STAFF INTERVENTIONS TO REDUCE DEPRESSIVE SYMPTOMS IN CANCER PATIENTS

- Training in communication skills. Adequate doctor-patient communication will:
 - Reduce patient's fears and anxiety
 - Help patient understand and elaborate relevant medical information
 - Increase patient's perception of control (which is considerably reduced with the disease)
 - Allow the patient to discuss worries that may interfere with treatment administration, with oncologist
 - Enhance treatment adherence
 - Facilitate patient's global psychological adjustment

STAFF INTERVENTIONS TO REDUCE DEPRESSIVE SYMPTOMS IN CANCER PATIENTS

- Baile *et al.* have described a six-step protocol (SPIKES) to deliver bad news and improve doctor-patient communication:

- **S** Setting: Prepare an adequate environment; Privacy, involve significant others, establish rapport with patient, etc.
- **P** Perception: How does the patient perceive his medical situation? “Before you tell, ask” (e.g., “What do you suspect your symptoms are due to?”)
- **I** Invitation: Obtain patient’s invitation to deliver medical information. “How would you like me to give you your test results?”
- **K** Knowledge: deliver medical information. “I am sorry to tell you that your test results have revealed...”
- **E** Empathizing and Exploring: Assess the patient’s emotions using empathetic responses
- **S** Strategy and Summary: Describe strategy/follow-up and summarize interview

STAFF INTERVENTIONS TO REDUCE DEPRESSIVE SYMPTOMS IN CANCER PATIENTS

- Use of simple screening instruments to detect depressive symptoms:
 - It is recommended that all patients be screened for depression in the clinic upon their first visit and on a regular basis thereafter by their oncologist, especially when changes occur in their disease status (remission, recurrence, progression of disease, etc.)
 - The Distress Thermometer¹ (described earlier) is a valid and reliable screening tool. Patients are asked about the nature and source of their distress (physical, social, psychological or spiritual). In addition to detecting distress, it facilitates referral to the appropriate discipline (mental health, social work, pastoral counselor, etc.).

STAFF INTERVENTIONS TO REDUCE DEPRESSIVE SYMPTOMS IN CANCER PATIENTS

- Explain to patient and family that depressive symptoms can be treated
- Provide continuity in patient care
- Monitor patient's sense of wellbeing and needs in a continued manner along the disease continuum
- Work with the family: Provide basic caretaking guidelines and support for family members
- Explore one's own attitude towards illness, suffering, death and dying

STAFF INTERVENTIONS TO REDUCE DEPRESSIVE SYMPTOMS IN CANCER PATIENTS

- **Increase patient's perception of control:**
 - Provide options
 - Inform adequately
 - Anticipate patient's needs
 - Facilitate adaptive coping mechanisms
 - Respect defense mechanisms as long as they don't interfere with treatment administration
 - Normalize patient's feelings
 - Help maintain realistic hope
 - Remain available to listen to patient's worries and fears

TREATMENT OF DEPRESSION IN THE CANCER SETTING

- Combination of psychological interventions and pharmacotherapy tailored to specific patient needs is the most effective approach
- Guidelines for screening, diagnosis and psychological and pharmacological treatment are available*

*Akechi T. *et al.*, *Psychooncology*, 2007;18(1):23-29
Holland JC & Bultz BD, *J Natl Compr Canc Netw*, 2007; 5:3-7; NCCN, 2008



European Society for Medical Oncology

THANK YOU!

ANXIETY IN CANCER PATIENTS

Maria Die Trill, PhD

Coordinator, Psycho-Oncology Unit

Hospital Universitario Gregorio Marañón

Madrid

ANXIETY IN CANCER PATIENTS

- **Anxiety is a common reaction to a cancer diagnosis**
- Anxiety may persist throughout the disease process, affecting the patient's quality of life significantly
- Anxiety often coexists with depression in cancer patients
- Anxiety is a frequent reason for psychiatric and psychological consultation in the cancer setting

ANXIETY IN CANCER PATIENTS

Anxiety is defined as the apprehensive anticipation of future danger or misfortune accompanied by feelings of dysphoria or somatic symptoms of tension¹

Anxiety in the cancer patient is a normal response to perceived threat: loss of body functions, alterations in appearance, changes in social roles, family disruption, death, etc.

¹Diagnostic & Statistical Manual of Mental Disorders, IV-TR, American Psychiatric Association, 2000

ANXIETY IN CANCER PATIENTS

- **Anxiety tends to appear or worsen at critical points during the course of cancer:**



At diagnosis



At the beginning and end of treatment



At recurrence



At advanced or terminal stages

ANXIETY IN CANCER PATIENTS

Need to separate anxiety as a state
from anxiety as a relatively stable
personality characteristic, or trait
(state versus trait anxiety)

Patients with high levels of trait
anxiety will carry this predisposition
throughout the disease course.
Importance of early identification

PATHOLOGICAL ANXIETY IN CANCER PATIENTS

- **Pathological anxiety can be identified because (ICD-10; DSM-IV):**
 - It tends to be out of proportion to the level of threat
 - It persists or deteriorates when no intervention is administered
 - The intensity of symptoms is unacceptable regardless of the intensity of threat (these include recurring panic attacks, severe physical symptoms, abnormal beliefs such as thoughts of sudden death)
 - A disruption of the usual or desirable functioning takes place

Above criteria are difficult to apply to cancer patients* :

- Cancer is always associated to some real threat: the threat of loss, death, etc.
- While the duration of symptoms is important in distinguishing abnormal anxiety, the natural history of anxiety in oncology is uncertain
- Disruption in functioning is common in cancer patients (i.e., intrusive and unpleasant thoughts regarding recurrence, disability or death can disrupt concentration, decision – making, sleep, etc.)

TYPES OF ANXIETY DISORDERS

- PANIC DISORDER
- AGORAPHOBIA
- GENERALIZED ANXIETY DISORDER
- SIMPLE PHOBIA
- SOCIAL PHOBIA
- OBSESSIVE-COMPULSIVE DISORDER
- ACUTE STRESS DISORDER
- POST-TRAUMATIC STRESS DISORDER
- ADJUSTMENT DISORDERS WITH ANXIOUS FEATURES
- ANXIETY DISORDER DUE TO A GENERAL MEDICAL CONDITION
- SUBSTANCE-INDUCED ANXIETY DISORDERS

PREVALENCE OF ANXIETY DISORDERS IN THE GENERAL POPULATION

In the US, one-year prevalence for all anxiety disorders among adults exceeds **16%** ¹

In the UK reported prevalence is between **3%** and **16%** ²

¹Magee WJ *et al.*, Archives of General Psychiatry, 1996;53:159-168

²Jenkins R. *et al.*, Br J Psychiatry 1998;173:4-7

PREVALENCE OF ANXIETY DISORDERS IN CANCER PATIENTS

- Prevalence is uncertain due to limitations in research methodology: Differing study populations (single vs. mixed cancer diagnosis; differing tumor sites; early vs. late stage disease; outpatient vs. inpatient; etc.); varying diagnostic criteria and assessment instruments; studies failing to separate anxiety from depression, etc.
- Estimated current prevalence of anxiety disorders in oncology is within a range of 15% - 28% *
- Numerous studies show that anxiety disorders are more common in cancer patients than in the general population

*Derogatis LR *et al.*, American Psychiatric Press 1989
Lee MS *et al.*, Eur J Cancer 1992; 28 A:1340-1344
Kaasa S. *et al.*, Radiotherapy and Oncology, 1993; 27:193-197
Ibbotson T. *et al.*, Eur J Cancer 1994; 30 A(1): 37-40

CLINICAL PRESENTATION (I)

ACUTE ANXIETY SYMPTOMS

- Uneasiness, unpleasant feeling of arousal, restlessness
- Irritability
- Inability to relax; tendency to startle
- Difficulty falling asleep (leads to fatigue and low tolerance to frustration)
- Recurring, intrusive thoughts and images of cancer
- Occasionally, sense of impending doom
- Distractibility
- Helplessness and sense of loss of control over feelings
- Symptoms of autonomic arousal: Rapid or forceful heartbeat, sweating, unpleasant “tightness” in stomach, shortness of breath, dizziness
- Vegetative disturbances: loss of appetite, decreased sexual interest
- Parasympathetically-mediated symptoms: abdominal distress, nausea, diarrhea

CLINICAL PRESENTATION (II)

CHRONIC PREEXISTING ANXIETY DISORDERS

- Preexisting anxiety disorders tend to exacerbate with cancer diagnosis
- Panic attacks (sudden, extreme anxiety accompanied by sympathetic nervous system arousal and an overwhelming urge to escape) may be reexperienced when exposed to medical procedures, treatment toxicity, etc.
- Post-traumatic stress disorder and generalized anxiety disorder may be reactivated by the stress of cancer
- Specific phobias (extreme anxiety on exposure to the feared objects and avoidance of them) may interfere with administration of cancer treatment (claustrophobia, phobia to needles) and may lead to anticipatory anxiety

PSYCHOMETRIC INSTRUMENTS TO MEASURE ANXIETY IN CANCER PATIENTS

- **HOSPITAL ANXIETY AND DEPRESSIONS SCALE – HADS¹**
- **PROFILE OF MOOD STATES – POMS²**
- **BRIEF SYMPTOM INVENTORY- BSI³**
- **STATE-TRAIT ANXIETY INVENTORY – STAI⁴**

¹Zigmond AS & Snaith RP, Acta Psychiatr Scand. 1983; 67(6):361-370

²McNair DM *et al.*, Manual for the profile of mood states, Educational and Industrial Testing Service, San Diego, CA, 971, p. 27

³Derogatis L. & Melisaratos N., 1983, The Brief Symptom Inventory: An introductory report. Psychological Medicine, 13, 595-605.

⁴Spielberger CD *et al.*, STAI 1970, Consulting Psychologists Press, Palo Alto, CA

VARIABLES ASSOCIATED WITH ANXIETY IN THE CANCER SETTING

- Premorbid anxious tendencies (elevated trait anxiety) and obsessional personality traits ¹
- Stage of the disease: Anxiety appears to increase as cancer progresses²
- Disease symptoms such as pain, are associated to increased anxiety
- Cancer treatments are anxiety-provoking:
 - Type of treatment and tumor's response to it have been associated with anxiety³
 - Treatment side-effects are associated with anxiety (e.g., anticipatory nausea and vomiting)⁴

Noyes R. *et al.*, Anxiety Disorders. In Psycho-Oncology, JF Holland, ed.1998, NY,Oxford University Press, p.548-563

¹Fallowfield L. *et al.*, Psychological outcomes of different treatment policies in women with early breast cancer outside a clinical trial, British Medical Journal, 1990; 301:575-580.

²Hopwood P., *et al.*, Psychiatric morbidity in patients with advanced cancer of the breast: prevalence measured by two self-rating questionnaires. Br J Cancer, 1991; 64(2): 349-352.

Brandenberg Y. *et al.*, Anxiety and Depressive Symptoms at different stages of malignant melanoma. Psycho-Oncology, 1992; 1:71-78

³McArdle CS *et al.*, Br J Surg,1990; 77:280-282

⁴Jacobsen PB *et al.*, Behavior Research & Therapy,1993; 31 (8): 739-748

MEDICAL CONDITIONS ASSOCIATED WITH ANXIETY IN THE CANCER SETTING

- Altered metabolic states (e.g., hypoxia, hyperthermia)
- Sepsis
- Delirium
- Endocrine conditions (e.g., hypoglycemia, hypocalcemia, hyperthyroidism)
- Hormone-secreting tumors
- Medications (e.g., corticosteroids, antiemetics, bronchiodilators)
- Discontinuation of certain drugs is associated with withdrawal symptoms (e.g., alcohol, benzodiazepines)

ANXIETY-REDUCTION TECHNIQUES IN THE CANCER SETTING

Psychological Interventions

- Individual supportive psychotherapy
- Progressive muscle relaxation
- Hypnosis
- Training in deep breathing techniques
- Meditation
- Biofeedback
- Guided imagery
- Systematic desensitization
- Cognitive techniques (Aim is to change anxiety-provoking beliefs and preoccupations)
- Group psychotherapy

ANXIETY- REDUCTION TECHNIQUES IN THE CANCER SETTING

Pharmacological Interventions

- Beta – blockers
- Tricyclic antidepressants (i.e., imipramine)
- Selective serotonin reuptake inhibitors (i.e., paroxetine)
- Short-acting benzodiazepines (i.e., alprazolam)
- Long-acting benzodiazepines (i.e., diazepam)
- Neuroleptics (i.e., haloperidol)

Doctor-Patient Communication

- Information tailored to patient's needs
- Effective communication skills are imperative



European Society for Medical Oncology

THANK YOU!