Pancreatic cancer and depression – A Case Study

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5 year survival

All Cancers Excluding Non-Melanoma Skin Cancer (C00-C97 Excl. C44): 2010-2011
Age-Standardised Five-Year Net Survival, England and Wales
Pancreatic cancer

- **Pancreatic cancer**
  - Pancreatic ductal adenocarcinoma
  - Male:Female 2:1
  - Median age 71
  - Higher incidence in smokers, ETOH, pancreatitis
  - Silent malignancy
- Vague symptoms
- Delayed presentation
- Highly symptomatic
Pancreatic Cancer (C25): 2010-2011
Net Survival up to Ten Years after Diagnosis, Adults (Aged 15-99), England and Wales

Please include the citation provided in our Frequently Asked Questions when reproducing this chart: http://info.cancerresearchuk.org/cancerstats/faq/#How
Prepared by Cancer Research UK
Original data sources:
Survival estimates were provided on request by the Cancer Research UK Cancer Survival Group at the London School of Hygiene and Tropical Medicine.
http://www.lshtm.ac.uk/eph/note/cancersurvival/
Signs & Symptoms of pancreatic cancer

- Low mood or depression
- Indigestion not responding to prescribed medication
- Diabetes new onset and not associated with weight gain
- Pale and smelly stools that don’t flush easily
- Jaundice (yellowing of the skin and eyes, possible itchy skin)

Mid-back pain
Upper abdominal pain
Pain on eating
Fatigue
Unexplained weight loss

DO NOT IGNORE THEM!
If you persistently experience one or more of these symptoms which are not normal for you, contact your GP straight away or call the NHS 111 Service

Let’s drive earlier diagnosis

www.pancreaticcanceraction.org
Helpline 0303 040 1770

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Case Study Mr. EG

- 67 year old man
- Smoker, moderate amounts of ETOH
- Wife had passed away from ovarian cancer 3 years previously
- Retired builder
- 6 month history of
  - Weight loss
  - Loss of appetite
  - Low mood
Case Study Mr. EG

- Saw GP 4 times over 6 months
- Diagnosed with depression
- Started on citalopram
  - No change in symptoms
- Declined counselling
- Stopped citalopram
- DNA'd several appointments
Case Study Mr. EG

• Admitted to hospital with increasing back pain
• By this point had lost 10 kg
• No appetite
• Fatigue
Case Study Mr EG

- Seen by various medical staff during hospital stay
  - Told he had ‘shadows’ in the liver
  - Noone mentioned the word ‘cancer’
  - Noted in the medical notes ‘not engaging’ and ‘withdrawn’
  - Biopsy
  - MDM
  - 13 days after presentation a diagnosis of cancer was made
Case Study Mr EG

- Metastatic pancreatic cancer
- Told his diagnosis by an F1 on a morning round, no family member/friends present
- Referred to oncology

2 week wait before he was seen

What we didn’t know

Dr Google – 5 year survival for stage 4 pancreatic cancer (3%)
Chemotherapy

• Incurable
• PS 1
• Low mood
• Combination chemotherapy

The median overall survival was 11.1 months in the FOLFIRINOX group as compared with 6.8 months in the gemcitabine group (hazard ratio for death, 0.57; 95% confidence interval [CI], 0.45 to 0.73; P<0.001)
Palliative chemotherapy

• FOLFIRINOX
  – Standard chemotherapy
  – 3 drug combination

  – PICC line – visual daily reminder
Case Study Mr EG

- Consultation every 2 weeks
- Focus on physical symptoms / toxicities
  - GI toxicity
  - Peripheral sensory neuropathy
  - Ca19-9 falling
- What wasn’t discussed
  - Insomnia - Steroids
  - Increased agitation
  - Low mood
  - Alopecia
Response

- After 6 cycles of chemotherapy
Case Study Mr EG

• Explaining mid treatment CT results
• Shrugged his shoulders
• Flat affect
  • Increasing isolated
• Changes in appearances –stopped going to the pub
• Alopecia, weight loss, PICC line

• Peripheral sensory neuropathy
• Played guitar

• Cat – need to give away?
Case Study Mr EG

- Referred to psychological services for counselling
- Referred to psychiatrist – started mirtazapine
- Agreed to continue chemotherapy
  - Completed 6 months of chemotherapy in total
  - Stable disease
  - Break from chemotherapy
Linking depression and pancreatic cancer

- Depression

- Studies date back to 1930s
  - ‘6th symptom’
  - Predates pancreatic cancer diagnosis
  - Lack of high quality studies

- 50% to 78% of patients with pancreatic cancer experience depression
Pathophysiology

- Depression – weakens immune system – leads to cancer
- Pro-inflammatory cytokines – IL6
- Immune system
- Hormonal – related to hormone secretion from the pancreas
- Paraneoplastic

Hormonal – related to hormone secretion from the pancreas
Linking Depression and Pancreatic cancer

• 1) Is depression a specific feature of cancer or a consequence of other symptoms and subsequent prognosis

• 2) Is depression itself a promoter of oncogenesis
Depression and anxiety

- Precedes diagnosis
- Not just reactive to the diagnosis/physical symptoms
- 1931 - Triad of anxiety, depression and 'sense of impending doom’
- Several studies ensued

- Depression
  - 258 patients – retrospective study
- doesn’t affect mortality
Effects of metastatic cancer - not due to presence of local cells

These “remote effects” or paraneoplastic manifestations of cancer include metabolic and endocrine syndromes

Much more common in lung

Depressive symptoms are found in 58% of paraneoplastic limbic encephalitis cases
- Immune reaction
- CSF
  - Paraneoplastic – precedes diagnosis
  - Improves with treatment of underlying cancer
Cytokine mediated

• Higher than normal plasma IL-6 concentrations were associated with a diagnosis of major depression in cancer patients
  – Higher levels - larger tumours, liver metastases
  – More research
High risk groups?

• Age, smoking, alcohol use, obesity
• Symptoms of depression and cancer overlap
  – Lack of energy
  – Challenging cancer – no standard targeted treatment despite recognised mutations
  – Several negative phase III trials
What we could have done differently

• HNA

• Discuss patients hopes and fears
  – Cat!

• Improve holistic care
  – Body image – particularly for men

  Early involvement of psychology/psychiatric services
  Screening tools for patients with cancer
Mind and Body at GSTT

Design educational resources for staff and patients that will cover
• The psychological needs of patients with cancer
• Understand holistic care
• Address our diverse patient population and the different needs of our patients
• Promote well being in our staff
Guy’s Cancer Academy

- Retrospective studies looking at mental health records and correlate with pancreatic cancer diagnoses

- Prospective work in oncology clinic – screening tools for depression

- Monitor depressive symptoms – correlate to outcomes and treatment responses
Patient-centred projects

- In-DEPTH (holistic needs assessments)
- Communication skills
- Promoting diversity
- Develop online resources for patients
- Develop online resources for health care workers
Thank you!

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