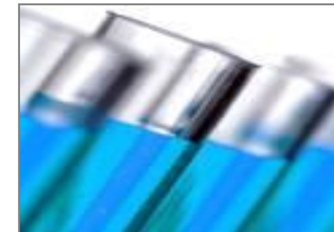
Cambridge University Hospitals

NHS Foundation Trust

Pain Management for Pancreatic Cancer Patients.

Dr Sarah Galbraith

Consultant in Palliative Medicine



Pain in pancreatic cancer - overview

- 5 year survival <5%
- 50-70% pancreatic cancer patients have severe pain
- Classically abdominal and back pain
- May have multiple pains
- Early recognition and referral for pain management
- Manage pain alongside surgical or oncological treatments, Enhanced Supportive Care
- Pain is a subjective somato-psychic experience
- Site of tumour plays a role

Causes of pancreatic cancer pain

- Stent insertion
- Inflammatory
- Infection
- Neuropathic
- Visceral
- Somatic
- Post surgical
- Psychological distress
- **Other conditions**
- Total pain

Total Pain

Physical

Cancer

Treatment

Insomnia & chronic fatigue

Debility

Concurrent problems

Psychological

Anger at therapeutic failure

Fear of pain +/- death

Feelings of helplessness

Social

Worries about family & finances

Loss of job prestige & income

Loss of social position

Spiritual

Why does this happen to me?

Why does god allow me to suffer like this?

What is the point of it all?

Pain Management

- WHEN
- WHO
- HOW

- WHEN

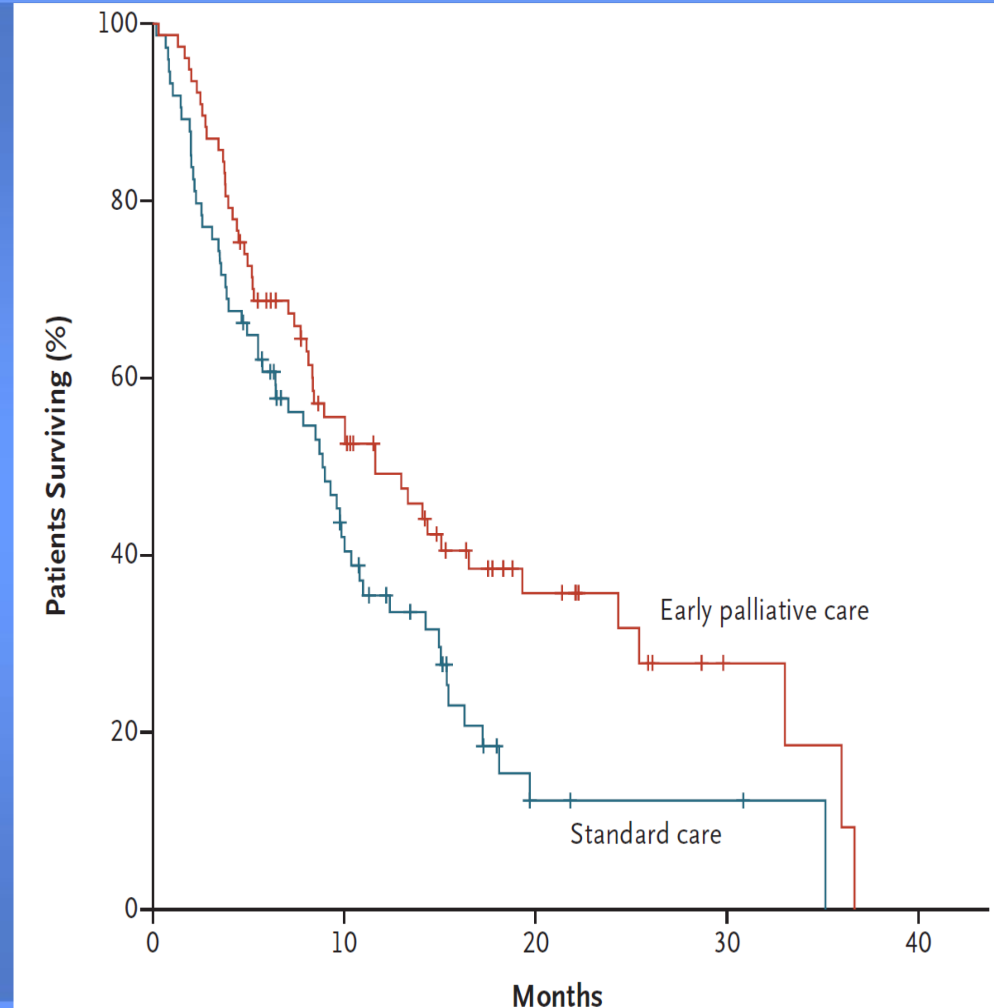
Innovation and **excellence** in health and care

Enhanced supportive care /early palliative care / symptom management

- Palliative care holistic assessment early
- Patient led agenda
- Allow patient to dip in and out
- Well being/living well
- Difficult conversations, future care planning
- Opportunity to weigh up benefits and burdens of treatments
- An alternative to chemotherapy or active oncological treatments or alongside oncological management
- Symptom management started early

	Control group	ESC group
Mortality (%)	28 (56%)	27 (54%)
Median survival (time from diagnosis to death)	**293 days**	**431 days**
CCC Admissions	34	22
Admissions to other Trusts	46	18
Total bed days	316	228
Average bed days	6.3	4.6
30 Day Chemo mortality (%)	**8 (16%)**	**1 (2%)**
Is PPC documented?	**2**	**15**
PPC achieved?	1	6
Missed Appointments	17	18
Deferred chemotherapy sessions	51	20

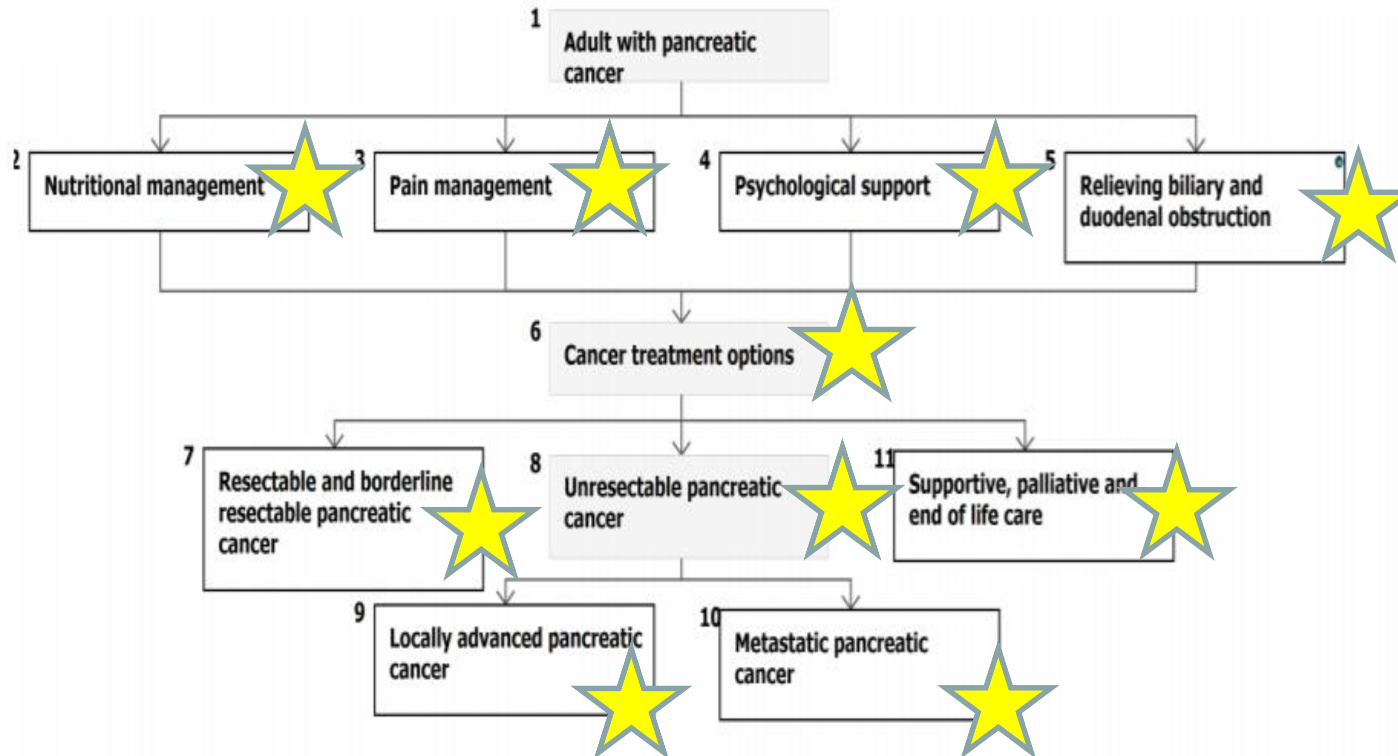
Early Palliative Care (NEJM, J. Temel 2010)



Innovation and **excellence** in health and care

- WHO

NICE Guidance 2018 - Pancreatic Cancer



Innovation and **excellence** in health and care

- HOW

Pain history

- Acknowledge and validate the symptom
- How many pains
- Post op pain or persistent pain
- Site, Character, Frequency
- Precipitating and relieving factors
- Holistic assessment, impact of psychological state
- Pain management in the context of future care planning
- What do I expect this patient to be doing in 2 weeks time or 2 months time?
- Relationship to other symptoms
- Incident pain

Non pharmacological management

- Information

"Without honesty and planning patients may feel isolated, distressed, frightened, this impacts on pain and symptoms"

- TENS machine
- Heat pads
- Complementary therapies, acupuncture
- Psychological support

NICE Guidance Pain Management in Pancreatic cancer

- Consider EUS-guided or image-guided percutaneous neurolytic coeliac plexus block to manage pain for people with pancreatic cancer who:

- have uncontrolled pancreatic pain
- **or ….** opioid adverse effects
- **or …..** escalating doses of analgesics.

Interventional pain management

- Coeliac plexus block/neurolysis
- Sympathectomy
- Epidural
- Pancreatic duct stent

Coeliac plexus block

- Opioid sparing
- When? (Amr et al 2013)
- How? Cochrane review 2011
- Benefit for 4 weeks, not sustained at 8 weeks
- Contraindications – infection, anti-coagulation, haemorrhagic conditions

Amr et al

Coeliac Plexus nerve block

Innovation and **excellence** in health and care

Drugs

- WHO Pain Ladder
- Route of administration
- Side effect profile
- Anti inflammatory
- Opioids, methadone
- Anti-neuropathic agents
- Anti-spasmodic
- Ketamine
- Benzodiazepines
- Ste[illegible]ds

Opioids

- Morphine
- Oxycodone
- Fentanyl
- Alfentanil
- Buprenorphine
- Methadone
- Side effects
- Renal and liver failure choices
- Morphine myths

Morphine Myths

- Addiction
- Confusion
- Unable to drive/function
- ‘It must be really bad’
- Nothing left for later

Anti-neuropathic agents

- Gabapentin
- Pregabalin
- Amitriptyline
- Duloxetine
- Opioid sparing?

Innovation and **excellence** in health and care

Summary

- Pancreatic cancer pain(s) management is complex and **needs a multi modal holistic approach,** involve palliative care early
- Use interventional nerve blocks
- Opioids are the mainstay of drug management
- Use anti inflammatory and anti- neuropathic drugs
- Remember morphine myths

References

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- Amr YM et al.Journal of Pain Sep 2013 v29 Comparative study between two protocols for management of severe pain in patients with unresectable pancreatic cancer :one year follow up
- Koulouris A et al Digestive diseases and science. April 2017 v 62 Pain in patients with pancreatic cancer: prevalence Mechanism Management and Future Developments
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- Velayudhan et al opioid-induced hyperalgesia. Continuing education in anesthesia, critical care and pain. V 14, June 2014
- Vayne-Bossrat P. et al. Interventional options for the management of refractory cancer pain – what is the evidence Support Care Cancer Sept 2015 v24
- Dobosz I et al Invasive treatment of pain associated with pancreatic cancer on different levels of WHO analgesic ladder. 2016 BMC Surgery
- NICE Guidance 2018
- Palliative Care Formulary

Any Questions?

Methadone

- mu and delta opioid receptors agonist
- NMDA receptor antagonist
- Metabolised in liver, excreted by intestines and kidney
- Beware QT prolongation
- Large volume of distribution
- 4-7 days to reach steady state
- Widely variable plasma half life
- Oral, s.c. or s.l. mixture
- Alternatively use low o.d. dose in addition to other opioids

Ketamine

- General anaesthetic
- NMDA antagonist, blocks excitatory channels
- Significant side effects - psychotomimetic effects, urinary and hepatobiliary toxicity
- Short burst therapy sc
- Continuous therapy orally
- With benzodiazepines