Cancer in children

Diarmuid Kerrin
Consultant Paediatrician, BHNFT

with acknowledgement to Dr Dan Yeomanson and colleagues, SCH

Disclaimer

- I am not a paediatric oncologist
- They are very clever, specialised… but holistic

- I will try share some of my experience / thoughts / tips
- I do a regular session for paediatric trainees with a paediatric oncologist from SCH (questions to follow) so what follows should be broadly accurate…

The nub of the issue

- We all worry about missing cancer
- This is a high profile issue nationally
- Secondary care face similar issues to primary care:
  - how to sort the ‘wheat from the chaff’
  - though the numbers / odds are different

Football: crosses v corners – which is more likely to result in a goal?

- A cross from open play
- A corner

Clinical reasoning

- Common things occur commonly
- What's the worst it could be and how can I tell?

Cases

Case 1 Emergency Department referral of a 21 month old child with 3-4 week history of being generally unwell, decreased appetite, weight loss, not opening bowels properly, possible lump on left side of abdomen

- Rank the following diagnoses in order of likelihood

  - A) Coeliac disease
  - B) Wilm's tumour
  - C) Neuroblastoma
  - D) Constipation
  - E) DIOS

Explain your reasoning.

What other information do you need?

Childhood solid tumours

- Rare individually; uncommon as a group
- Different types and pattern to adult cancers, ie not lung / bowel / prostate / breast
- Can take time to diagnose and stage once referred to oncology
- Very variable treatments and prognosis

Case 2

GP letter accompanying 7 yr old British Asian child to Children's Assessment Unit: two lumps in right side of neck, ?present for a few months, possibly larger at the moment

- Select the three most important things you wish to obtain from the following list

  - A) Social history
  - B) Immunisation history
  - C) Old hospital notes
  - D) Abdominal examination
  - E) ENT examination
  - F) Growth chart details
  - G) Chest examination

What is your differential diagnosis?

What aspects of the HPC should yield the most important information?

Childhood leukaemia

- Sometimes only emerges over time
- Don’t blindly use steroids for painful joints
- Management now is as much geared to minimising adverse effects as to trying to increase cure rates

Case 3

You are covering a new patient clinic; the consultant is away. Referral letter states:'6 yr old child with 3 month history of bad headaches – please do the needful'!

- Select the three actions most likely to help you reach a diagnosis
  - A) Ophthalmology opinion
  - B) Neurological examination
  - C) CT scan head
  - D) MRI scan head
  - E) BP measurement
  - F) Family history details
- What is missing from this list?
- What is the one key feature of the headache which is likely to determine your approach?

Childhood brain tumours

- Usually more than just a headache
- Headaches unusual in under 5s
- Site may be more important than tumour type / degree of malignancy - neurosurgeons
- Endocrine and cognitive effects of radiotherapy

Palliative Care services

- Paediatric oncology outreach nurses (SCH)
- Bluebellwood Hospice
  - Input for patients in community as well as in the Hospice itself
  - Support for parents and siblings
  - Education for health professionals

Broad management issues

- Time to diagnosis / treatment
- Principles of treatment (including randomisation)
- Febrile neutropaenia
- Symptom control
- Communication

Long term issues

- Cure rates
- Risk of later cancers
- Long term effects from treatment
- Fertility
- Psychological issues

Final comments

- Childhood cancer is rare overall
- We may not identify it at first presentation, but this does not necessarily compromise outcome
- (Continue to) Listen to parents' instincts
- The tertiary centre will assume full care for the treatment course and will have long term involvement
- Primary (and sometimes secondary care) still has a role, mainly for the rest of the family