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SIOG 2012

**Management of Chemotherapy Toxicities**

Annie Young      Professor of Nursing, University of Warwick  
University Hospitals Coventry and Warwickshire



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**Older People with Cancer having Chemotherapy**

**Worry**

- How to function day-to-day
- *How to cope with side effects*
- How to manage finances
- How to care for basic needs during treatment

Managing chemo when elderly, presents unique challenges and obstacles, which an elderly person can often overcome with the right information and resources

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**Chemo Toxicity in Older Adults**

- Chemotherapy toxicity is common in older adults

In prospective study of 500 patients\*:

- 53% experienced at least one grade 3 to 5 toxicity
- 2% experienced a treatment-related mortality
- **Predictive Model - Geriatric assessment variables independently predicted the risk of toxicity**
- **Move onto risk stratification and scoring\*\***

Hurria A et al, 2011. *JCO* 29 (25):3457-3465  
Extermann M et al, 2012 *Cancer* 118(13):3377-86

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**Oncologist/Haematologist Perspective**

**Impact of Patient Age on Clinical Decision-Making in Oncology**

- 'Clinicians may be using chronological age as a proxy for other factors when making recommendations on cancer treatment for older patients'
- Some patients may receive less intensive treatment solely on the basis of their chronological age rather than biological age

National Cancer Equality Initiative  
<http://www.dh.gov.uk/health/2012/02/age-oncology>

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**? Increased Toxicity from Chemotherapy in Older Patients**

- "A pooled analysis of adjuvant chemotherapy for resected colon cancer in elderly patients"
- 3,351 patients and compared the performance of patients in four different age groups

Sargent D et al, 2001 *NEJM* 345:1091-1097

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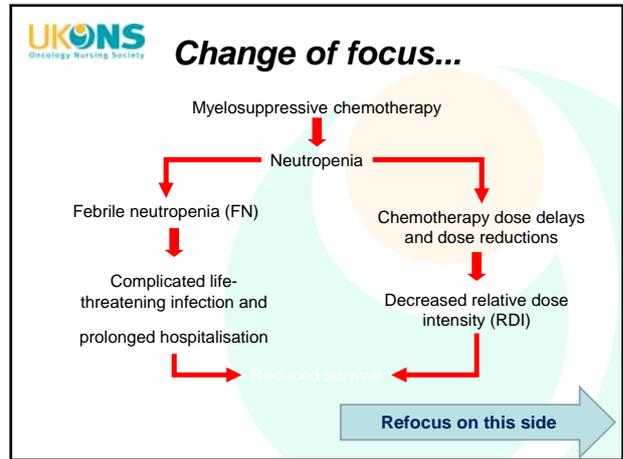
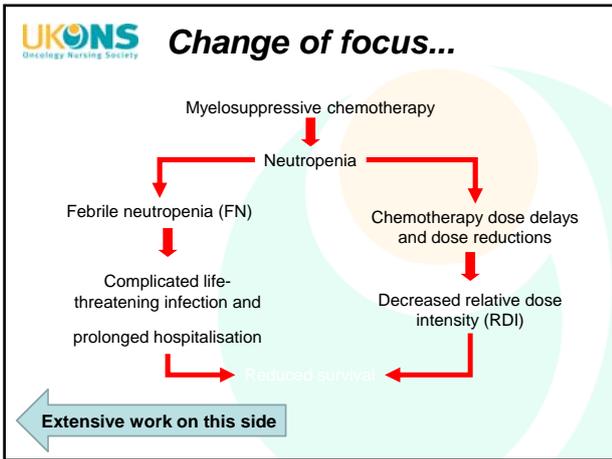
## Jury still out?

- "Selected elderly patients with colon cancer can receive the same benefit" from chemotherapy as their younger counterparts
- The five-year overall survival was
  - 71% for those who received chemotherapy
  - 64% for those who did not receive chemotherapy
- The toxic effects - nausea or vomiting, diarrhoea, stomatitis and leucopenia **in those above 75 years old - not increased compared to other age groups**  
*Sargent D et al, 2001 NEJM 345:1091-1097*

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## Comorbidities

- In Older People - Cancer +++++
- Discharge records from 41,779 adult cancer patients admitted to hospital for Febrile Neutropenia, showed overall in-patient mortality to be 9.5%
- The risk of mortality increased significantly for patients with additional co-morbidities; patients with more than one major co-morbidity had a > 20% risk of mortality  
*Kuderer NM et al. 2006 Cancer;106:2258-2266*



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**HSC** Belfast Health and Social Care Trust

### ONCOLOGY ADVICE CARD

**Feeling unwell? Phone us first!**

Contact us straight away if you have any of the following during your chemotherapy and in the six weeks afterwards.

It is really important that you are cared for quickly and properly because your 'immune system' is affected by chemotherapy and a delay could be life threatening.

- Feeling very hot or feeling very cold
- A temperature of below 36°C or above 37.5°C
- Shivering attacks or flu like symptoms
- Breathing problems, persistent cough, coughing up green/ yellow sputum or blood
- Pain on passing urine, frequency of urine or blood in your urine
- Feeling or being sick
- Diarrhoea for more than 24 hours or bleeding from your back passage or in your stools
- Sore mouth or sore throat preventing you from eating or drinking
- Unexplained rash, new bruising or purple spots on your skin
- Pain not controlled by medication
- Bleeding from your gums or nose, blood blisters or bleeding that does not stop with general first aid
- If you have a central line (PICC, Hickman) or Port a cath and the area around it becomes red, swollen and/or painful
- Any other symptoms which cause you concern

**Your contact numbers**  
24 Hour Helpline (365 days/year): 028 9026 3805

**PLEASE KEEP THIS CARD IN YOUR HOME AND SHOW IT TO ANYONE WHO IS LOOKING AFTER YOU!**

Version: 04/2010 (P11610)

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### Oncology/Haematology 24 HOUR TRIAGE

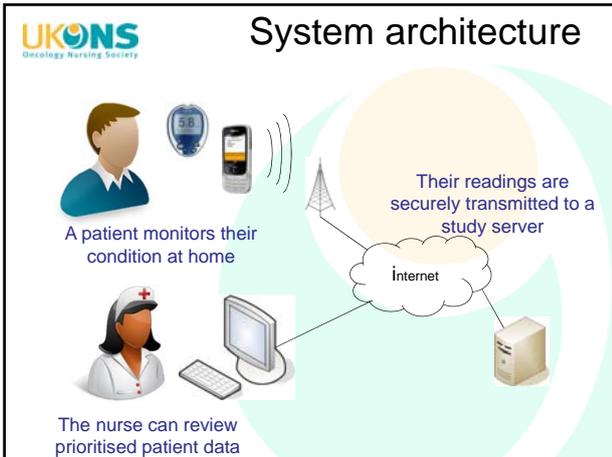
RAPID ASSESSMENT AND ACCESS TOOL KIT

**Oncology/Haematology 24 HOUR TRIAGE**

**Oncology Alert Card**

**24 HOUR HELPLINE**  
028 9026 3805

When you are receiving chemotherapy or are about to receive it, please bring this card with you to work for anyone who is giving you treatment and any tests.



**Toxicity Monitoring via Mobile Phone**

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- Developed a monitoring system to alert cancer nurse to presence of toxicities

Temperature: Please enter your temperature: **37.5**

Bowel movements: How many times have you opened your bowels in the last 12 hours? **2**

Mucositis: How severe was it? **Mild**  
Moderate  
Severe  
Mouth ulcers, or can eat only a soft diet and drink

What about patients without side-effects?

Frequency

Toxicity Severity



**Algorithms of Care for common side effects**

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**Suspected Neutropenic Sepsis: SPSS KEY PRINCIPLES**

Patients with all levels of neutropenia should be considered to be neutropenic with clinical suspicion. If the patient presents in a non-sterile environment, contact must be made immediately to the acute oncology team at the nearest unit.

Clear to notify time for first antibiotic should be less than one hour.

Antibiotics should be given, reviewed and frequency, duration, and treatment reviewed should occur in an environment where appropriate skills and expertise are available. If patient continues to deteriorate despite initial treatment their condition should be discussed against with senior oncologist.

**SPSS 2012 - Day of Admission**      **SPSS 2012**

Early warning signs chart: Daily to include history, temperature, monitoring      **Monitoring**      **SPSS 2012**

Discontinue or administer ensure safe disposal of unused      **Chemotherapy drug**      Do not recommence regular oncology, make arrangements

Administerive administration      **Administration**      Do not recommence regular oncology, make arrangements

Clinical review of each hour or immediate      **Additional administration**      Administer 1st antibiotic 20-30 mins and 2nd hour of administration. Unresponsive blood count after 48 hours? Notify to 2<sup>nd</sup> line oncologist.

Clinical review after 24 hours infection, biochemistry      **Culture**      Consider site and range infections, take swabs for monitoring

Assess for low and peripheral, sodium, urine,      **Fluid and electrolyte balance**      Urine with monitoring to check results. Rehydrate and correct changing electrolytes.

Aggressive fluid replacement in combination      **Neutropenic sepsis (NPS) 2012**      Rehydrate fluid to resolve. Continue to monitor electrolyte daily.

Search daily for evidence of      **Neutropenic sepsis (NPS) 2012**      Investigate cause of sepsis. Daily vitals and management of deterioration.

Investigate cause of sepsis      **Neutropenic sepsis (NPS) 2012**      Investigate cause of sepsis. Daily vitals and management of deterioration.

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- Conclusions**
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- What are the patient expectations?
  - Involve the geriatric nurse in MDT for older patients
  - Avoiding toxicity is better than treating it
  - To avoid toxicity we must have accurate data about risk and severity of side effects by age
  - Real-time monitoring of toxicity is optimal
  - This requires more age specific trials, or at very least, trials stratified by age
  - Simply opening a study up without age restriction isn't fair to drug or older people