Issues Arising When Treating Acute Leukaemia In The Elderly Patients.

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- Leukaemia in the elderly.
- Treatment options.
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Acute Leukaemia In The Elderly

- People living longer due to improved health system.
- Incidence increase with age.
- Normally presents with poor prognostic cytogenetics.
- Despite intensive therapy CR rate low.

Treatment Options

- Intensive chemotherapy.
- Oral therapies.
- Supportive therapies.
- Palliative care.

Intensive Therapies

- A.M.L.= Induction such as Idarubicin/Cytarbine or Daunorubicin with Cytarabine.
- A.L.L.= UKALL, Vincristine, Steroids, Rituximab.
- A.M.L.= Investigative: Clofarbine, alone or in combination with Daunorubicin, low dose Cytarbine or Myelotarg.

Intensive Therapies

- Consolidation therapies.
- Treatment options in relapse.
- Due to comorbidities & age transplant not always an option.

Oral Therapies

- Hydrea.
- Rapamune/ Sirolimus
- Zarnestra/ Tipifarib.
- Glivec
- Others such as Etoposide.

Supportive Therapies

- Blood products.
- Antibiotics/antifungals
- G-C.S.F. / EPO.
- Fluids.

Pallative Care

- Oral Therapies.
- Symptom relief.
- Blood products.
- Antibiotics.
- Others

Complications

- Age, performance status and other comorbidities.
- Prolonged myelosuppression.
- High rate of mortality due to infection during neutropenic phase (esp fungal).
- Haemorrhage.

The Experience for the elderly!!

Complications Cont…

- Increased hospital stay due to blood products and antibiotic administration.
- Tumour lysis.
- Organ failure.
- Quality of life issues.

Psychological Issues

- Quality of life issues older
  - people may have fewer supports.
- What it means to medics? / What it means to patients?
- Body image issues.
- Are we giving true picture.?

Phychological Issues Cont…

- Physical needs emotional needs, loss of control.
- Concerns regarding family adaptability.
- Financial needs.
- Fear and anxiety.

Triggering Thoughts

- Due to high mortality rates associated with intensive therapy and low complete remission curative intent has to be individualised/ questioned.

- However older adults who achieve remission are often able to return to their previous quality of life and functional capacity.

Triggering Thoughts Cont...

- Is treatment worth it?
- No studies comparing supportive therapy with intensive therapy (ethical dilemma) to determine both quality of life and traditional outcomes are measured.

Triggering Thoughts Cont…

- Old studies between 10 and 20 years ago in Europe did a comparison studies where they randomized patient to low dose chemotherapy to intensive therapies.

- Results showed that patient that received intensive therapy did experience prolonged survival of 9 – 13 months.

Triggering Thoughts Cont...

- However this survival was at a cost of 31% treatment related mortality compared with 10% in the lower dose arm.
- Also trial in 2004 compared low dose cytarabine to hydrea with positive results in quality of life for the low dose cytarabine arm.
- Personal opinion as to who had a better quality?

Conclusion

- Difficult task when advising the older adult with leukaemia about the appropriateness of induction and post remission therapies.
- In advising these patients do we do a good enough job?

However!!!!

Case Study

- A 74 year old male, presented in Jan 2008 with a scrotal haematoma, oedema and pneumonia.
- PHx of DM, hypertension.
- FBC
  - HB 10.8 g/dl
  - WBC 72.9 x 10^9/l
  - Plts 43 x 10^9/l
- Peripheral blood showed numerous blasts.
- Biochemistry: glucose 20mmol/l, albumin 25g/l, GFR > 90
- CXR: R middle lobe pneumonia and R pleural effusion.
- Performance status = 3.

Case Study

- Bone marrow aspirate, biopsy and flow were consistent with AML.
- Normal Karyotype.

Case Study

- What would you recommend for this patient?
  1. Intensive chemotherapy.
  2. Best supportive care +/- hydroxyurea.
  3. Tipifarnib (Zarnestra).
  4. Low dose ara-C 20mg BID x 10/7 s.c.
  5. Clofarabine 20mg/m^2 x 5/7.

Case Study

- He was treated with Clofarabine 20mg/m^2 x 5/7.
- This was very well tolerated, no unexpected toxicities.
- Within 4 weeks his counts recovered.
- Repeat marrow showed normal cellularity with < 5% blasts.

Case Study

- What would you do now?

Case Study

- He has now had 2 cycles of post remission therapy with Clofarabine and remains healthy and in C.R.

Questions???

Thank you

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