Initial treatment for myeloma

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At presentation

• 15% patients have no symptoms
• 38% emergency presentation
  - Kidney failure
  - Spinal cord compression/loss of movement
  - Fracture
• Remainder have symptoms
  - Backache or bone pain
  - Tiredness/anaemia

Decision to treat

• Is the myeloma causing symptoms?
  - unwell, tiredness, pain, frequent infections
• Is the myeloma causing organ damage?
  - kidneys, bone marrow, bone, hypercalcemia
• Are there other medical problems or individual issues to consider?
Asymptomatic myeloma

• Diagnosis does not automatically mean that treatment must start

• Good reason to wait until symptoms develop
  - regular monitoring of paraprotein, blood counts, kidney function etc

• No symptoms but blood tests show progression
  - judgment when to start treatment
  - joint decision

Aims of treatment

Anti-myeloma treatment: Reduce myeloma activity and related damage

Supportive treatment: Relieve symptoms and complications

Reduce symptoms and complications
Improve quality of life
Prevent further bone and other organ damage
Prolong survival

Successful treatment should...

• Slow progression and induce longest possible remission/plateau

• Achieve maximum response with the minimum of side-effects

• Relieve pain and address other symptoms

• Prevent further damage to the body

• Improve and preserve quality of life for as long as possible
Treatment approach

Diagnosis

Asymptomatic myeloma
Symptomatic myeloma

Regular monitoring

Are you a candidate for stem cell transplant

Clinical study

Yes
No

Induction treatment, stem cell transplant
Non-intensive drug treatment

Treatment decisions:
Doctor’s perspective

Disease & Prognosis

• How does the myeloma affect me?
• What’s my goal, what do I want?
• How will I expect to feel?

Treatment Options

• What are my options?
• What are the side-effects?
• What should I expect?
• How long does treatment last?

Practicalities

• Do I have to stay in hospital?
• Can I still work?
• How far do I have to travel & what time?
• Can you help with money?

Your consent to treatment should be an informed one
Drugs used to treat myeloma

1950s - 60s
- Melphalan (+ prednisolone)
- High-dose dexamethasone

1970s - 80s
- Combination chemotherapy
  - VAD (vincristine, adriamycin, dex)
- High-dose chemotherapy
- Bone marrow/stem cell transplantation

1990s - 2000s
- Thalidomide
- Velcade
- Revlimid
  - ‘Novel agents’

2010s -
- Carfilzomib, pomalidomide?

Which combination?

Novel agent
- Chemotherapy drug
- Steroid

Myeloma XI study

Randomise

CTD

RCD

Assess response

SD + PD

CR + VGPR

PR + MR

VCD

Nothing

VCD

Assess response

TRANSPLANT IF APPROPRIATE

No maintenance

Revlimid maintenance

Rev + vorinostat maintenance

Randomise

Is Revlimid superior to thalidomide?

For patients achieving sub-optimal response, can VCD improve response rates?

Does Revlimid or Rev + vorinostat maintenance improve survival?
Treatment options:
Non-transplant patients

Thalidomide-based
- CTD
  - Cyclophosphamide
  - Thalidomide
  - Dexamethasone
- MPT
  - Melphalan
  - Prednisolone
  - Thalidomide
  - Max 8 cycles

Velcade-based
- VMP
  - Velcade
  - Melphalan
  - Prednisolone
  - Max 8 cycles

Supportive
- Bisphosphonates
- Zometa, pamidronate, Bonefos
- Blood transfusions/EPO
- Pain-killers
- Anti-thrombotic

As per NICE guidance

Treatment options:
Transplant patients:

Step 1: Induction treatment
Step 2: High-dose therapy and stem cell transplant
  - Autologous (own stem cells) – vast majority
  - Allogeneic (donor stem cells) – very small minority
Step 2: High-dose therapy and stem cell transplant

1. Stem cell mobilisation
2. Stem cell collection
3. High-dose melphalan
4. Stem cell transplant

Maintenance treatment?
- Continuous treatment after initial treatment
- Role of maintenance treatment still under debate
- Interferon – prolongs remission by ~6 months but difficult to tolerate
- Thalidomide – may benefit some patients
- Revlimid – promising data, increasing length of remission and overall survival, however, increased risk of second cancers

Remission – current practice
- No treatment, most drugs stopped
- Maintenance treatment – not standard
- Bisphosphonates for at least 2 years
- Minimal effective pain management
Summary

- Myeloma is an individual cancer - requires a personalised approach
- Patients should have a role in their treatment plan - important to discuss goals and perceptions
- Various treatment combinations are effective and generally well tolerated
- But, it remains a difficult and challenging disease
- More research required to understand and develop better treatments and better ways of using existing treatments

For information:

www.myeloma.org.uk
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