International Myeloma Society Annual Meeting 2022
Conference Report

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I was a grateful recipient of a UK Myeloma Forum (UKMF) and the Binding Site travel bursary which supported my travel to the IMS meeting in the United States. My abstract 'Physiotherapist-led exercise prehabilitation embedded within the multiple myeloma autologous stem cell transplant pathway' was accepted for oral presentation.

As an Allied Health Professional (AHP), I had clinical and research interests in attending both the main meeting programme and the coinciding Nursing Symposium. Overall, across the meeting there was a prevailing positivity of the increasing outcomes in survival in the disease, the reiteration of the clinical significance of minimal residual disease (MRD) assessment, treatment adjustments, and the increasing optimism growing with management strategies and evolution of CAR-T. However, this was also balanced with much discussion on the tolerance of new agents and careful balancing dosing of regimens.

The main meeting session that I enjoyed the most was that focussed on induction for newly diagnosed myeloma. Opening with Claudia Stege (Amsterdam UMC) who summarise treatment approaches for elderly and frail patients. She summarised a number of study outcomes stratified by frailty as measured using the IMWG or simplified frailty scores, using age and performance status alone. She presented data from a reclassified subgroup of 'ultra-frail' patients and their outcomes, which had distant inferior outcomes in terms of overall survival, progressions free survival and tolerance of treatment, compared to those classified as 'intermediate fit'. These ultra-frail patients have poorer outcomes generally and high rates of treatment discontinuation due to intolerance of toxicity and prospective identification of these patients could facilitate decisions regarding deintensification of treatment. She summarised that the simplified frailty score will overestimate 'fitness' compared to the IMWG score and the two cannot be used interchangeably, prospective studies should use the IMWG score.

Another talk in this session highlighted the impact of marginalisation of access to treatment and overall survival in newly diagnosis patients in Canada, presented by Alissa Viram (Ottawa Hospital). She demonstrated that there are disparities in access to early treatment especially among those from more marginalised, even in a universal healthcare system. However, once treatment commenced lower socioeconomic status was not associated with inferior survival. An interesting study that highlights that access is not the only barrier to equitable provision of timely health care.

In the final talk of the session Maria-Victoria Mateos (University Hospital of Salamanca) discussed the unmet needs and future questions for management of newly-diagnosed patients. She focussed on the heterogeneity of the disease and presented studies that again focussed on adaption to frailty. She summarised by posing consideration of moving on from distinguishing between transplant-eligible and ineligible patients towards identification of those who are 'fit' or frail.

In the interesting panel discussion that followed, the inherent limitations to dose escalation of many therapies came under question, as well as the under representation of frail patients in phase I studies. The need for greater consideration of quality of life was raised by Morie Gertz (Mayo Clinic). He stressed that dose de-escalation and maintenance studies need to go beyond reporting adverse events of grade III/IV toxicities as indication of tolerance and have greater reporting of quality of life outcomes. He raised an important point around the addition of more agents to regimens, and that greater quality of life data is required to be fully informed of the true consequences to patients of receiving these treatments, and the symptom burden they may have to tolerate over longer survival. Other panellists Sonia Zeegman (Amsterdam UMC) and Gordon Cook (Leeds) highlighted a need to better identify frailty, as well as the heterogeneity of those considered frail, to move beyond solely use of the IWMG index score and towards assessment of biological indicators of frailty and planning trials that are adequately powered to assess outcomes of subcategories of frail participants. Additionally, they stressed that frailty is not a static parameter and needs to be dynamically assessed, not only at diagnosis, as it may improve as well as deteriorate in the context of lessening disease burden and tolerance of treatment. The session chair Philippe Moreau (UH Hotel-Dieu) shared a reflection of the complexity of frailty index tools and the difficulty of undertaking in particular the assessment of activities of daily living. He turned to the audience to take a poll of how many clinicians are routinely undertaking comprehensive geriatric assessments in their practice, the response was one hand! Thierry Facon (CHU Lille) suggested the value in adding gait speed as a functional marker of frailty. Morie Gertz further added the 'on the fly' assessment of transplant eligibility in those over 65 years is a likely source of selection bias in outcomes data and more comprehensive assessment of eligibility is needed.

As a clinical academic physiotherapist, I found this session fascinating. Indeed, frailty is multifactorial and heterogeneous and not likely to be fully characterised by frailty indexes, although these are convenient ways to screen for potential frailty. These scores do need to be used prospectively in trials to determine differences in outcomes. Dynamic assessment of frailty at different timepoints in treatment and within trials is required to better understand the effects of treatment on frailty but also what is crucial and was not discussed within this session, is that many components of frailty are *modifiable*. The static use of index scores does not provide any insight into the range of potential opportunities to intervene and address modifiable elements of a patient's presentation of frailty.

Rehabilitation, including but not limited to exercise, can ameliorate key components of the frailty phenotype; reduced muscle strength, gait speed, fatigue and physical activity; and weight loss if dietetic input is added. All of these deficits are further exacerbated by undergoing chemotherapy, yet provision of rehabilitation alongside cancer treatment is generally lacking in the UK, particularly in haematological cancer. As outlined in the highlighted session, greater characterisation of frailty in myeloma into subgroups is needed, and to do this comprehensive assessment is required, yet most centres to not routinely undertake comprehensive assessment in geriatric groups. Another reflection is that it is considered complicated and time-consuming for clinicians to undertake even simple assessment with index measures. Perhaps what is missing is diversity within our myeloma clinical (and trials) teams – greater integration of AHP roles, such as physiotherapy and occupational therapy, within teams would provide the expertise to conduct these assessments (including PROMs), as well as provide the input to address identified deficits. The importance of frailty in myeloma is, as one audience member said, 'an old story' – what is needed to move forward is greater assessment of

frailty, not only to identify subgroups for outcomes in trials but to also offer patients the input and support to improve modifiable markers of frailty and offer them the best opportunity to tolerate their treatment and live the best life they possibly can in whatever time they have following diagnosis.

I would like to thank the UKMF and the Binding Site for my bursary award, it was a privilege to attend and speak at the meeting.