
A. Skyline of Eastern Province

Background

Sri Lanka, an island located in the Indian Ocean, has a square area of 65,700 Sq Km and has a population of 21 million. It is divided into 9 provinces, 25 Districts and 334 Divisional Secretary areas. In Sri Lanka the public sector provides universal free health care. The Department of Health and the provincial health sector cover the whole range of curative and preventive services.

National Cancer Institute Sri Lanka

National Cancer Institute (NCI) is the only cancer hospital of Sri Lanka, established in 1958, under the government health services. The institution is situated in greater Colombo area and provides cancer services to the population in greater Colombo area as well as to the patients referred from all other peripheral oncology units in the country. About 13,000 new cancer patients are registered at NCI annually. It has been recognized as a principal cancer centre, post graduate training unit and research institution of the field of oncology. Absence of HSCT at NCI was a major deficiency as most patients needing HSCT cannot afford transplants abroad.

In 2014 London based Tea company, Ahmad Tea donated a new Razavi Medical Complex valued EUR 1.2 billion to NCI where BMT unit with two rooms were developed.

A year later, with the support of Sri Lanka government, SL High commissioner in Australia and an education grant from Australia, NCCP SL constructed a new HSCT facility at newly built Razavi medical complex.

Autologous HSC mobilised with Cyclophosphamide (2g/m²) and GCSF (10 mcg/kg/day) and Transplant eligibility: Multiple myeloma (MM) in CR or PR, relapsed Non-Hodgkin’s lymphoma (NHL), Hodgkin lymphoma (HL) patients < 65 years, with good Performance status and viabiliy and contamination before product infusion.

Preparation


• Transplant eligibility: Multiple myeloma (MM) in CR or PR, relapsed Non-Hodgkin’s lymphoma (NHL), Hodgkin lymphoma (HL) patients < 65 years, with good Performance status and viability and contamination before product infusion.

• Autologous HSC mobilised with Cyclophosphamide (2g/m²) and GCSF (10 mcg/kg/day) for 9-10 days. HSC products were cryopreserved and post-thawed samples checked for viability and contamination before product infusion.

Results of the first year

20 autologous transplants were done in the first year. Mean age was 47 years (Range: 17-72) and 56% of the patients needed single apheresis. Median dose of BMT was 4.0 ± 1.0 x 10⁶/kg (Range: 3.1-7.4).

Median engraftment day was 13 (Range: 11-15). Median hospitalization was 18 days (Range: 14-20). All developed febrile neutropenia (7 had positive cultures). All developed Grade III thrombocytopenia needing platelet transfusions (Median platelets pack 12). Zero transplant related mortality (TRM) and acceptable morbidity achieved.

At the median follow-up of 47 weeks (to 3/11/2018), the overall survival is 100%, 11 (65%) multiple myeloma patients were in remission.

Conclusion

2½ years after initial planning of the HCT centre, 20 transplants were performed in our first year of operation with an overall survival of 100%.

This encouraging transplant outcome was attributed to, commitment by trained multi-disciplinary team complemented by partnership with an experienced and dedicated voluntary mentoring team, meticulous planning, adequate equipment and infrastructure, support from government, local and expat philanthropists.

As at 16 July 2018, further 14 patients have received autologous transplants bringing the total transplants to 34 within 19 months after commencement of the HSCT facility at NCI.

We plan to initiate allogeneic programme in NCI and to commence setting up of other HSCT centres in the country: The NCI team have expressed their commitment to continue mentoring BMT staff at the NCI and NBTS and would be prepared to help with the first few allo-SCT as they have done with the autologous programme.