Cancers in children and adolescents: Progress and challenges

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ABSTRACT

Paediatric Oncologists in Malaysia reported 705 children with cancer annually (2010 – 2012) compared to Malaysian National Cancer Registry with 583 children below 15 years (2007 – 2016), as reporting is not mandatory. Survival improved with time. In Sarawak, Precursor B-cell Acute Lymphoblastic Leukemia had improved survival with BFM95 (4yOS 88%) compared to UKALL (8yOS 81%). Acute Myeloid Leukemia did better with UK AML15 (5yOS 56%) compared to UK AML12 (10yOS 34%). In Hospital Tunku Azizah, Acute Promyelocytic Leukemia had excellent outcome using UK APML 2012 (10yOS 92%) compared to UK AML12 (5yOS 21%). Down Syndrome with Myeloid Leukemia did very well with MLDS 2007 (5yOS 94%) compared to DAT Protocol (2yOS 29%). Mature B-cell Lymphoma had excellent results with addition of Rituximab for Stage III (3yEFS 100% vs 60%) and reduction of intrathecal chemotherapy for Stage IV (2yOS 89% vs 33%). Hodgkins Lymphoma did excellently with EuroNet PHL-C1 (3yEFS 100%) compared to CCG5942 (3yEFS 74%). Relapse extracranial germ cell tumours had better salvage with CarboTIP (3yOS 67%) compared to ICE (3yOS 33%). High-risk Neuroblastoma faired better with addition of Dinutuximab Beta (3yOS 100% vs 58%). Ewing Sarcoma did better with AEWS0031 (2yOS 86%) compared to EiCESS92 (2yOS 60%). Advanced bilateral Retinoblastoma had better enucleation free survival and functional vision with SJCRH (4yEFS 44%) compared to JOE (4yEFS 12%). Excellent outcome was achieved with BEP for germ cell tumour of testis (5yOS 98%) and ovary (2yOS 91%). Wilms Tumour and non-Wilms renal tumours had excellent outcome (5yOS 91% and 88%) using COG regime. Challenges remained for patients with late presentation (50% Stage IV Osteosarcoma) and treatment refusal / abandonment (5%). Brain tumour survivors suffer long-term neurological and endocrine deficits. Care is not equally distributed across the country. Teenagers fall between the service gaps.

Keywords: Cancer, children, teenagers, improved survival, challenges