relationship between the EQD_2 for both treatment locations (CRT, SDRT) and the occurrence of a first CVA was assessed.
Results: After a median time of 24.9 years from the primary diagnosis and at a median attained age of 31.2 years, 28 survivors had a first CVA. Of them, 18 (64.3%) had ischemic events (Grade 3-4), and 10 (35.7%) had hemorrhagic events (Grade 2-5). One survivor was not treated with CRT nor with SDRT. Subsequently, two survivors had a second, and one a third CVA. The 35-year cumulative hazard in survivors treated with CRT only was 14.2% (95%CI, 3.5-24.9%), in survivors treated with SDRT only 6.8% (95%CI, 0-13.7%), and in survivors who received both CRT and SDRT 24.3% (95%CI, 6.7-41.8%) (Figure). The Cox analyses showed that both treatment locations significantly increased the risk of CVA in a dose-dependent manner (HR_{CRT} 1.02 Gy^{-1}; 95%CI, 1.01-1.03, and HR_{SDRT} 1.04 Gy^{-1}; 95%CI, 1.02-1.05).

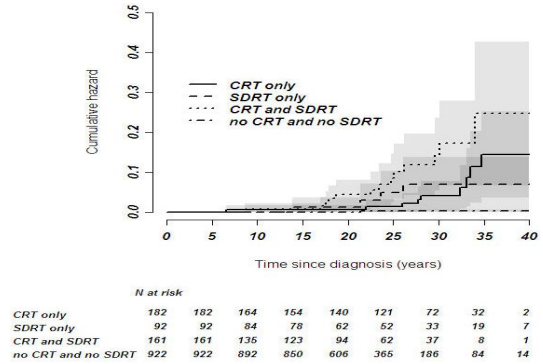
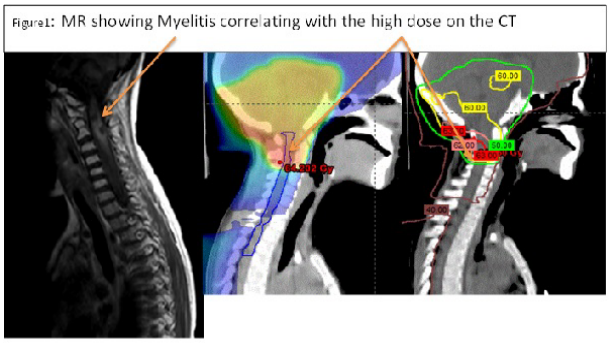


Figure. Cumulative hazards and 95%CIs for the first CVA ≥5 years after the primary cancer diagnosis in survivors treated with CRT only, SDRT only, both CRT and SDRT, and in survivors who had no CRT and no SDRT. Note: The SDRT only group consisted of 95 survivors; SDRT treatment could not be confirmed for 3 survivors, leaving 92 survivors for analysis.
Conclusions: Our results demonstrate that childhood cancer survivors treated with CRT and/or SDRT have an increased risk of CVAs as compared with survivors who had no CRT and no SDRT. Thirty-five years after treatment, almost 1 in 4 childhood cancer survivors treated with both CRT and SDRT experience a symptomatic CVA. In addition, these radiation-associated CVAs occur at a very young age. Therefore, continuing follow-up with a focus on tailored preventive strategies to reduce the risk of CVAs in this young population deserves special attention.

OC-0342
A UK national review of radiotherapy treatment plans for paediatric medulloblastoma in cases of neurotoxicity
H. Mayles[1], A. Baker[2], N. Thorp[2], J. Hayden[3], G. Horan[4]
[1]*The Clatterbridge Cancer Centre - Wirral NHS Foundation Trust, Physics Department, Bebington Wirral, United Kingdom*
[2]*The Clatterbridge Cancer Centre - Wirral NHS Foundation Trust, Radiotherapy Department, Bebington Wirral, United Kingdom*
[3]*Alder Hey Children's Hospital NHS Foundation Trust, Oncology Department, Liverpool, United Kingdom*
[4]*Addenbrooke's Hospital NHS Foundation Trust, Radiotherapy Department, Cambridge, United Kingdom*

Purpose/Objective: Paediatric metastatic medulloblastoma requires intensive treatment for the best results. Since 2007 the majority of UK centres used the Milan strategy (High dose Chemotherapy and twice daily Radiotherapy) to treat these patients. There were some reported cases of profound neurotoxicity and a review of plans and treatment method was done in order to check whether radiotherapy had contributed to the toxicity.
Materials and Methods: Patients with Grade 3-4 neurotoxicity, treated between 2008 and 2014, were identified and the toxicities classified into global and myelitis. Plan data (CT planning scans, Plans and Dosegrids) for the CranioSpinal (CNS) phase 1 and the Posterior Fossa Boost (PFB) phase 2 , was collected and imported into Eclipse (Varian). The dosimetry was reviewed for individual and summed phases. Where possible MR images showing myelitis were blended with the dose distribution on the CT scan. A questionnaire was circulated around all Centres to establish the RT technique and immobilisation used.
Results: 10 cases (8 male, all under 12 years), from 6 Centres were reviewed. All the children had a poor response to induction chemotherapy and received thiotepa as part of their high dose chemotherapy regime. The CNS dose was 39Gy in 30 Fr for 9 cases and 31.2 Gy in 1 Fr for 1. All received a PFB to a dose of 59.7 – 60 Gy. All Centres used a conformal Linac based technique with opposed Head fields matched to posterior Spine fields, and a shifting gap. 5 out of 6 centres used a supine technique. 1 Centre used VMAT for the PFB, others a 3DCRT plan. 1 Centre checked plans using summed doses, others checked each phase separately. The myelitis occurred in the PFB volume and it was noted that for these patients the C1 summed dose was >62 Gy, although less than 63Gy (105%), see Fig 1.



Conclusions: There was no evidence of radiation techniques contributing to neurotoxicity. However when the Milan protocol was adapted for the UK, there was no involvement of physics and certain details of the treatment were different, in particular that in Milan the PFB PTV would not include the spinal cord. This review also highlighted the importance of planning and summing both phases in order to assess the combined dose. It is recommended that special attention is paid to the cervical spinal cord dose with a strict dose constraint of 61Gy. Lessons learnt from this review highlight the importance of sharing experience both nationally and internationally especially for rare tumours.

Debate: SBRT / oligometastatic disease: Oligomets then SABR is standard of care

SP-0343
SBRT for oligometastatic disease: For the motion
M. Guckenberger[1]
[1]*University Hospital Zürich, Department of Radiation Oncology, Zurich, Switzerland*

Stereotactic Body Radiotherapy (SBRT) is today the accepted standard of care for early stage non-small cell lung cancer if