Aim Because of significant medical advances in the past 50 years, the number of adult survivors of childhood/adolescent cancer has increased dramatically. However, these survivors often experience late effects secondary to their cancer treatment, and thus represent a growing, at-risk, and vulnerable population with specific health care needs. The present study evaluated late effects in 62 children who have survived solid and brain tumours, diagnosed between 2006 and 2008.

Method Case notes, outpatient clinic notes, and computer-based information programmes were used to gather information. For each child, several fields of information were gathered, including age at diagnosis, type of tumour, treatment received, and active problems. Subjects were all children and young persons diagnosed with a solid and brain tumour between 2006 and 2008.

Results Results showed that 47% of children currently have an active on going late effect, the most prevalent being endocrine (15%), sensory (16%) and neurological/musculoskeletal (25%) disorders. The cumulative incidence of an endocrine complication was 15%. Growth Hormone (GH) deficiency was found in 10% of patients. Exposure to cranial radiotherapy was associated with an increased risk of GH deficiency (p < 0.0001), as was having undergone neurosurgery (p < 0.0001), see Graph 1. Hypothyroidism was seen in 6% of patients. Again, exposure to cranial radiotherapy was associated with an increased risk (p < 0.0001), and neurosurgery was significantly associated with developing hypothyroidism (p = 0.002).

There was a 16% incidence of sensory complications in the patients evaluated. Hearing loss was the commonest condition, with 10% of children experiencing it to some degree. It was statistically significantly associated with exposure to Cisplatin therapy (p = 0.0147) see Graph 1, but there was no effect of cranial radiotherapy (p = 0.2398) or age at diagnosis (p = 1.000), see Graph 2.

Conclusion Survivors have developed a range of late effects, predominantly sensory, endocrine and neurological. These findings highlight the importance of extended careful monitoring of persistent late effects, especially in these areas, in order to decrease overall sequelae, improve long-term outcome and overall quality of life.