

A review of the presenting symptoms, demographics, prediagnostic symptom interval (PSI) and tumour type of paediatric patients presenting to Queen Alexandra Hospital with primary brain tumours

Dr H Ord¹

Background: Primary brain tumours are the most common solid malignancy of childhood and represent one quarter of all childhood cancers.

The **Pre-Diagnostic Symptom Interval (PSI)** is the time between symptom onset and diagnosis.

Limiting the PSI of CNS tumours can improve both morbidity and mortality.

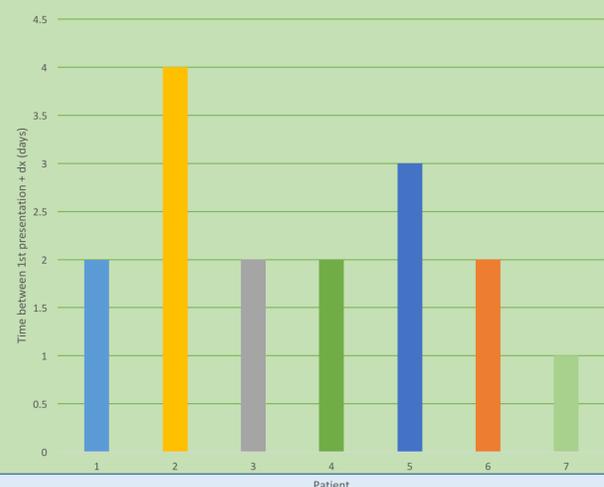
The morbidity post-CNS tumour is often devastating, with more than 60% of paediatric CNS tumour survivors being left with pronounced disability.

The aim of this audit was to review the Prediagnostic Symptom Interval of paediatric patients presenting with primary brain tumours between January 2013-January 2016

I also recorded other data including demographics, type of tumour, number of presentations before diagnosis and presence of red flag symptoms at presentation

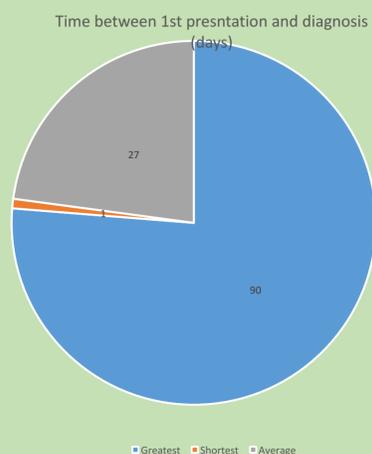
Results:

- Gender: 75% male, 25% female
- Age range: 2 months – 8 years
- Most common tumour type: Pilocytic Astrocytoma
- Number of presentations pre-diagnosis ranged from 1-4



Results:

- PSI ranged from 1 – 120 days
 - Average PSI 44 days
- Time between 1st presentation to diagnosis ranged from 1-90 days



Key learning points:

- Once children present to a healthcare professional the time to diagnosis can be significant, on average it is less than a month
- **The longest delays after initial presentation were when it did not lead to referral to secondary care straight away**
- *The greatest delay to diagnosis is the PSI itself*
- The key to reducing the PSI is EDUCATION (parents, young people, careers, teachers)
- HeadSmart guidelines very useful - 100% of cases had 'red flags' at presentation

Action plan:

- Teaching in local schools (via Stripes/ Headsmart)
- Promotion of Headsmart education material
- Medical student regional online teaching material