

## 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

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**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

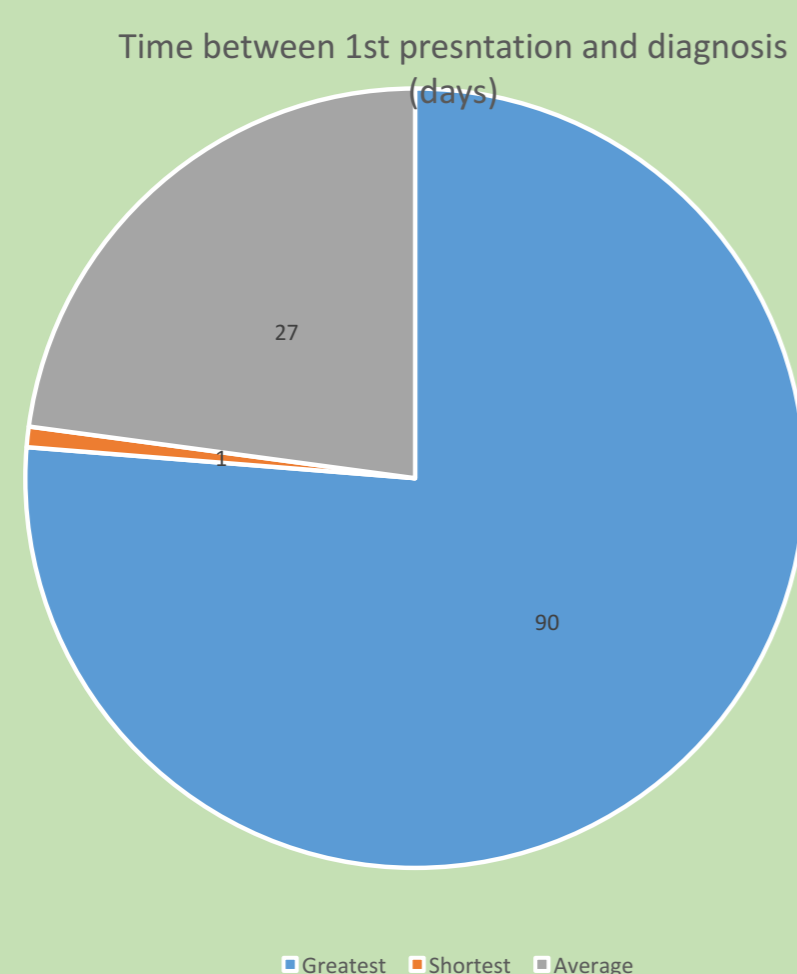
Results:

- 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 1<sup>st</sup> 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