

“Red flags”

Warning signs of cancer in children

Cancer in children is rare and potentially curable in over 70 per cent of patients. Early diagnosis is important, particularly with solid tumours where, in most cases, treatment can be less intensive and more successful if the tumour is smaller and has not spread from the primary area at the time of diagnosis. For this to occur a high index of suspicion is necessary.

The most common types of cancer in childhood are:

- **Leukaemia**
- **Central nervous system tumours**
- **Lymphomas**
- **Neuroblastoma**
- **Soft tissue sarcomas**
- **Nephroblastoma (Wilms Tumour)**

The features listed overleaf should alert you to a possible diagnosis of cancer.

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WARNING SIGNS FOR CANCER IN CHILDREN

Suspect cancer in a child with any of the following features

Pallor plus bleeding

- Petechiae;
- Purpura;
- Unexplained bruises;
- Persistent bloody oozing from mouth, gums or nose;
- Anaemia.

Persistent, unexplained fever, apathy or weight loss

- First exclude conditions such as urinary tract infection, pneumonia or inflammatory bowel disease (and tuberculosis or HIV in certain circumstances);
- Then consider malignancy.

Bone pain - persistent or recurrent

- Not localised, consistently to a specific area, often wakes the child at night and is not associated with trauma;
- A child may develop a limp, or a toddler may become reluctant to bear weight or stop walking; and
- Always investigate backache in a child.

Bone pain can be a feature of leukaemia or metastatic solid tumour such as neuroblastoma.

Unexplained neurological signs

- Headaches lasting longer than two weeks;
- Early morning vomiting;
- Ataxia;
- Cranial nerve palsy;
- Deterioration in school performance and missing school;
- Focal convulsions;
- Focal neurological deficit.

Localised Lymphadenopathy – when persistent and unexplained

Beware of:

- Axillary/inguinal/cervical glands which are >2cms, discreet, firm and non-tender, and do not get smaller after 2 week's treatment with antibiotics (if used for presumed infection);
- Glands in supraclavicular area.

Refer for an opinion/biopsy if uncertain or if lymphadenopathy persists for more than 6 weeks – do not give repeated courses of antibiotics.

An unexplained mass

- Important sites are: abdomen, testes, head, neck and limbs;
- If a young child with abdominal distension, or a suspected mass, is uncooperative screen with an ultrasound examination.

Eye changes

- White reflex;
- Recent onset of squint;
- Proptosis;
- Loss or changes in vision;
- Black eyes.

Need to consider particularly CNS tumours and retinoblastoma.

Black eyes especially if bilateral may be due to neuroblastoma, myeloid leukaemia or histiocytosis

Breathing difficulty

- A child with repeated presentations of inspiratory stridor who has been treated for croup and has not got better or has late onset "asthma" warrants a Chest X-ray to exclude a mediastinal mass, the latter usually due to T-cell lymphoma. This is a medical emergency, especially if they have distended veins over their chest wall due to SVC obstruction. In this setting it is best to avoid the use of systemic corticosteroids until the CXR has been viewed.
- Unilateral nasal obstruction can also be a sign of a mass in the posterior nasal space if not due to a foreign body.

If you suspect malignancy refer without delay to a paediatric oncology service