

Anatomical Pathology and Laboratory Skills Workshop (APLS)

Preface to lecture on paediatric solid tumours by A/Prof Duncan MacGregor:

So, the presentation: the beginning is just meant to convince you that neoplasia in children is different from the common adult cancers. It's different in its basic biology and mechanisms of oncogenesis, different sometimes in how we diagnose it, different in its natural history and often different in outcomes. That stuff isn't examinable, but I think it's important so you have a framework in which to place the facts you learn.

Then I've tried to think of the broad groups of paediatric tumours you're likely to come across and give a few important examples of each. Brain tumours, the group of undifferentiated small ('blue' though I don't like the word) cell tumours of childhood and how to approach the common ones, tumours that occur in germline conditions and syndromes, bone and soft tissue tumours (benign and malignant) etc.

And finally I've spoken a bit about the very widespread use of further molecular diagnosis to subtype or stratify these tumours, or even to make the initial diagnosis. This means that for every malignancy we receive we always freeze and store some - all of them - and we almost always imprint some for future FISH if needed.