Neuroblastoma: An Experience at Children's Hospital & Institute of Child Health, Pakistan.

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INTRODUCTION:

Neuroblastoma is an embryonal malignancy of the sympathetic nervous system that is derived from primodial neural crest cells.[1]

Neuroblastoma is the second most common solid malignancy of childhood after brain tumors, accounting for 9-10% of all pediatric neoplasms and heavily contributes to childhood cancer mortality.[2'3]

About 40% of neuroblastomas arise in adrenal medulla. The remainder occur anywhere along the sympathetic chain.[3'4]

These tumours have better prognosis if diagnosed before one year of age.[4]

OBJECTIVES:

The objectives of this study were to determine:

The age at presentation of neuroblastoma among children (0-15 years) .

The male to female ratio.

The frequency of neuroblastoma arising from different sites.

MATERIALS & METHODS:

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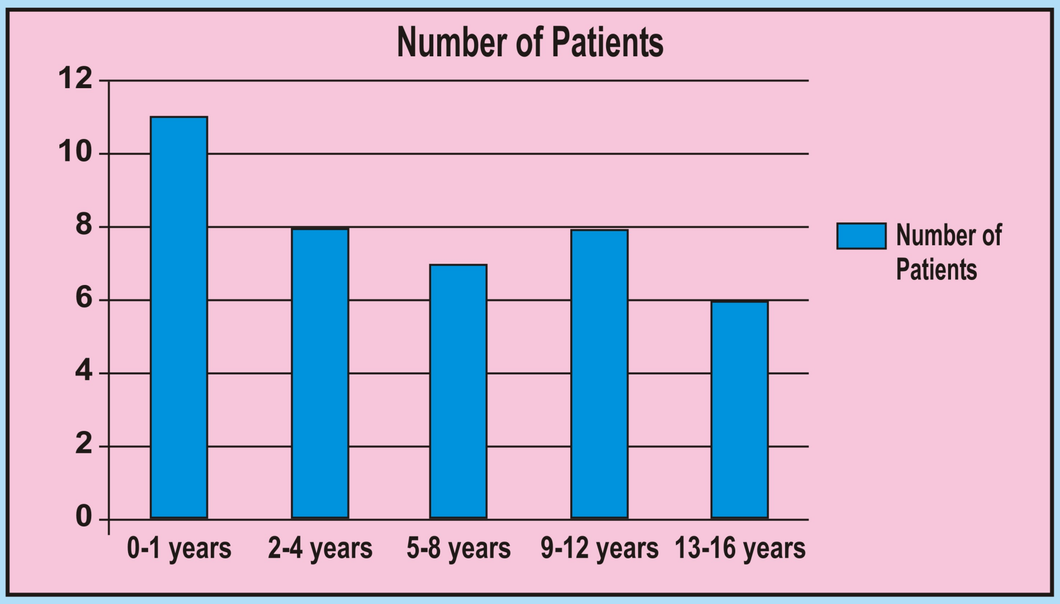
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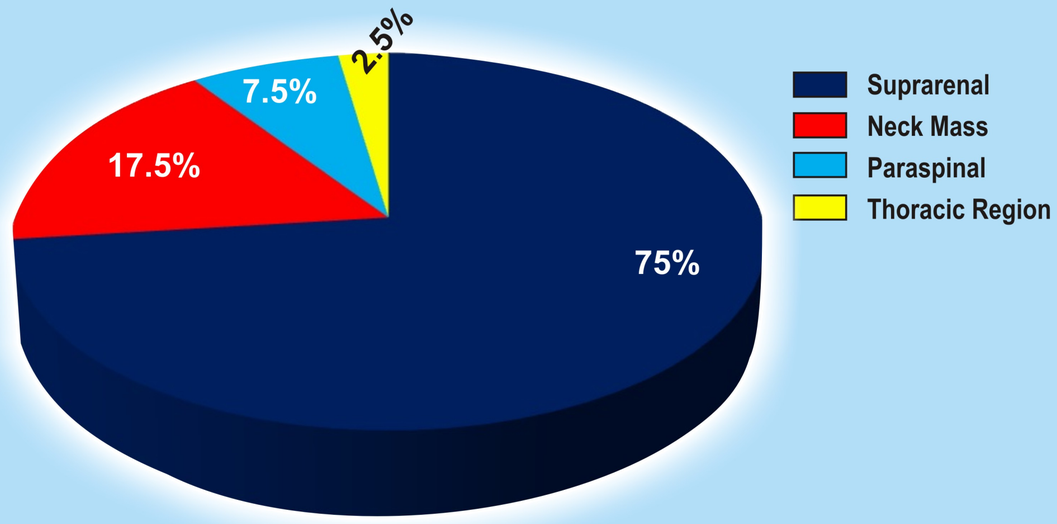
The present retrospective study included all the patients diagnosed with neuroblastoma in histopathology department of the Children Hospital and Institute of Child Health, Lahore Pakistan in the last five years from Jan 2011 Dec 2015. All the slides were reviewed and the pathologic diagnosis was confirmed.

RESULTS:

We diagnosed 40 cases of neuroblastoma in children (below 15 years of age). Male to female ratio was 2:1. Minimum and maximum age of patient was 27 days and 13 years respectively.



Distribution of Patients According to Site



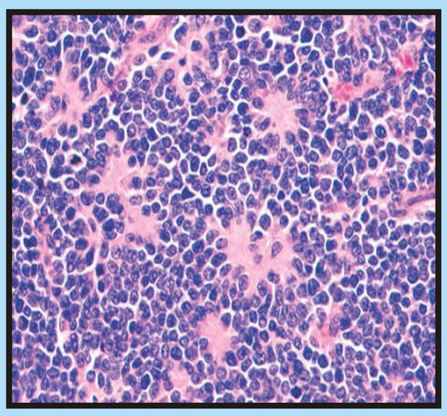


Fig 1: A monotonous population of hyperchromatic cells with scanty cytoplasm.(H&E 400X).

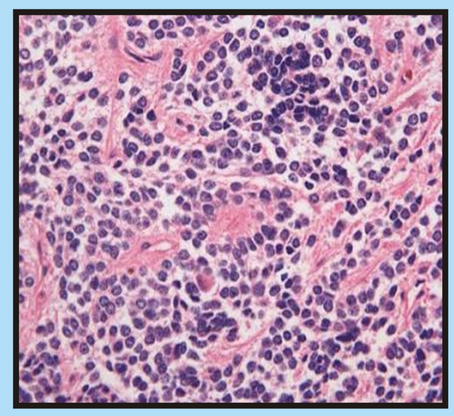


Fig 2: Hyperchromatic cells with Homer Wright Rosettes (H&E 400X)

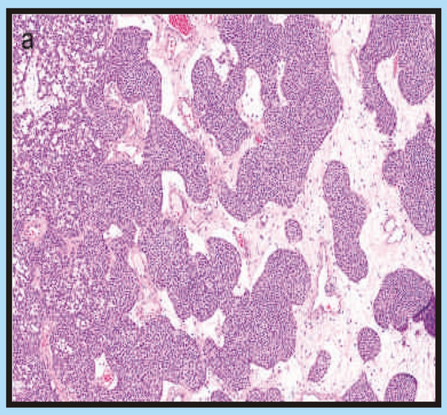


Fig 3: Lobules of monotonous looking cells with abundant neurofibrillary background(H&E 40X).

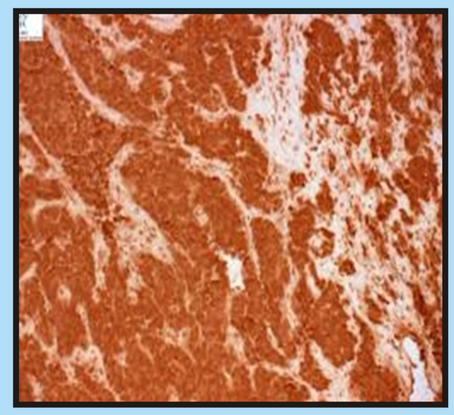


Fig 4: NSE positivity in Neuroblastoma (H&E 40x)

CONCLUSION:

Neuroblastoma presenting before one year have good prognosis but in our study most of the patients presented after one year of age. Early determination can improve survival rate.

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