Pattern of Pediatric Solid Malignant Tumors in Kashmir

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There is a paucity of reports about the incidence and pattern of childhood cancer in India. This study from Kashmir valley was done to find out the prevalence, clinical presentation and pathology of solid pediatric tumors.

Material and Methods

A retrospective analysis of 93 childhood tumors (except leukemia) received in the Department of Pathology during January, 1983 to June, 1989 was done in relation to the age, sex and clinical presentation of the patients and the pathology.

Results

Ninety three cases with solid malignant tumors formed 0.1% (93 out of 60,112) of total hospital admissions, 4.3% of pediatric admissions (2,159) and 1.7% of all (5,372) malignant tumors.

Lymphoma was the commonest tumor in this study (30%) followed by Wilms' (14%), neuroblastoma (12.9%), nervous system tumors and soft tissue sarcomas (11.8%) each. There was a definite male preponderance, the sex ratio being 1.9 : 1. The M : F ratio for individual tumors was lymphoma 3.8 : 1, Wilms' tumor 5.5 : 1, neuroblastoma 2 : 1, nervous system tumors 1 : 1.75 and soft tissue sarcoma 1.2 : 1. Children below 5 years of age were affected more (39.8%), followed by prepubertal children (31.1%) and children between 6-9 years of age (29%). Wilms' tumor and neuroblastoma were more in children below 5 years of age whereas lymphoma and nervous system tumors were more in children above 5 years.

All except one case of lymphoma presented with lymphadenopathy, cervical lymphadenopathy being the commonest in both Hodgkin's (73.7%) and non-Hodgkin's lymphoma (55.6).

Of the 13 cases of Wilms' tumor, left kidney was involved in 9, the ratio of left to right kidney being 2.3 : 1. One half of the cases of neuroblastoma presented with abdominal masses, the other sites were spine and mediastinum (2 cases each), and palate and jaw (one case each). Nearly a quarter (27%) of nervous system tumors arose in the temporal lobe, 18% from ventricles and the rest from other sites. The commonest tumor (45.4%) was astrocytoma.

Discussion

Solid malignant tumors are not rare in India, their incidence being 1% of all pediatric admissions(1). In this study the incidence is 4.3% of all pediatric admissions and 1.7% of all malignant tumors.

Lymphoma was the commonest tumor (30%) which is similar to the observation from Bombay(1). Other studies have reported Wilms' tumor as the commonest(2,3). Children below 5 years had the highest frequency (39.8%) of tumors especially embryonal tumors reflecting their origin from immature tissues. This was fol-

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lowed by prepubertal children (31%). This observation is similar to that observed in other places in India(2,4,5). However lymphoma occurred more (75%) in children above 5 years.

Although there was an overall male preponderance (1.9 : 1), the nervous system tumors showed definite female preponderance (1 : 1.8) which has not been reported earlier(2-5). Wilms' tumor involving the left kidney has also been reported by other workers(2,4). Hodgkin's disease formed 2/3rds of malignant lymphoma cases. All other studies have reported a higher incidence of non-Hodgkin's lymphoma(2,4).

The possibility of carcinoma in young age is usually not thought of and these cases are liable to be missed clinically. We noted it in 5.4% cases, similar to what has been observed from Bombay(1).

To conclude the prevalence of solid pediatric tumors in Kashmir is not significantly different from the rest of the country. It is tempting to postulate that environmental carcinogens do not have sufficient time to act and have thus no role in pediatric tumors. The role of genetic factors thus appears to be more important.

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Congenital Sensory Neuropathy with Anhidrosis

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Congenital sensory neuropathy with anhidrosis (CSNA) is a rare hereditary disease with autosomal recessive mode of inheritance. The condition has also been referred to as congenital insensitivity to pain with anhidrosis in an earlier report(1). Subsequently, other reports have also appeared in literature(2,3). Because of its extreme rarity only nine cases have been described in world literature(4). We report a case diagnosed clinically as congenital sensory neuropathy with anhidrosis in a 12-year-old boy from Pondicherry.

Case Report

A 12-year-old boy, was brought in May 1989 with the complaints that he repeatedly injures himself, is indifferent to pain following injuries and has a low intelligence. The patient was the product of a consanguinous marriage and was born prematurely after 8½ months of gestation. The patient is the eldest among three siblings. His younger brother is normal, while the

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