

Letter to the Editor

Retrospective Analysis of Twenty-Six Cases of Wilms' Tumour for Factors Predicting Metastasis and Relapse

Sir,

Wilms' tumour (WT) is common renal tumour among children and accounts for 9% of all paediatric tumours¹. Patients most frequently present as painless abdominal lump often noticed by mother. The cure rates for this tumour have improved significantly during the past two decades. Histology is most important prognostic factor. Other factors like age, regional lymph node status, capsular breach and preoperative spill have also been found to play role in metastasis & relapse. We retrospectively reviewed case records of past 10 years. Among 558 cases of childhood tumours, 26 cases of Wilms tumour were recorded. Median age was 18 months. 2 patients had stage I, stage II-5, stage III-10, stage IV-8 and 1 patient had bilateral Wilms' tumour (stage V). We analyzed the risk of metastasis and relapse in these patients (Table-1).

12 of 26 patients had evidence of metastasis; eight at the time of diagnosis and four developed metastasis after treatment. Lung was the commonest site of metastasis followed by liver. Local relapse was defined as appearance of disease at the renal bed after completion of treatment.

Age has significant effect on relapse and metastasis.³ (Two year age has been taken as a cut off.) Patients with age more than two years have higher incidence of metastasis and relapse.³

Tumour weight was also studied for metastasis and relapse. Garcia system classified tumours according weight with tumours <550gms having good prognosis.⁴

Studies have shown higher incidence of WT in females⁵. Our study had contrast finding with males predominating in number. Sex has been shown to have no effect on relapse and metastasis of disease. The same fact was evident from our study also.

Capsular breach increases local relapse without having much effect on distant metastasis.³ Our study showed that capsular invasion increases incidence of local relapse as well as distant metastasis.

Extension of tumour to local lymph nodes predisposes to distant metastasis without affecting local relapse.⁶ Positive lymph node increases the chances of distant metastasis by 50%.⁸ The lymph node status has been associated with anaplasia.⁶

Our study had increased incidence of metastasis in lymph node positive group. The number of local relapse was more in positive lymph nodes. Results of our study emphasize the point that lymph node status is an important prognostic factor.

Studies have evaluated the relation of laterality of tumour with distant metastasis and local relapse. There has been no significant role of laterality on the prognosis of disease.³ Our study also had little effect on distant metastasis and relapse.

Histology is the most important factor for predicting metastasis, relapse and survival.³ Prognostically the well differentiated tumour has best prognosis and diffuse anaplasia has worst.⁵ Occurrence of anaplasia has been associated with higher age and positive lymph node.³ Our study had similar results with presence of anaplasia having higher incidence of metastasis and relapse.

Table-1

FACTOR	NUMBER	NO. OF METASTASIS (%)	NO. OF RELAPSE (%)
AGE			
<2Year	16	3(30)	1(10)
>2Year	10	9(56)	6(37)
SEX			
Male	16	7(44)	4(25)
Female	10	5(50)	3(30)
CAPSULAR INVASION			
Present	08	4(50)	5(62)
Absent	18	8(44)	2(11)
LYMPH NODE			
Positive	12	7(58)	5(42)
Negative	14	5(36)	2(14)
LATERALITY			
Left	14	8(57)	4(28)
Right	11	4(36)	3(27)
Bilateral	01	0	0
HISTOLOGY			
Favorable	16	6(37)	3(19)
Unfavorable	10	6(60)	4(40)
PEROPERATIVE SPILL			
Present	07	3(43)	2(28)
Absent	19	9(44)	5(26)

Preoperative spill has not been of importance for metastasis and relapse.⁷ Our study also had similar result with no difference in metastasis and relapse between spill and non spill cases.

Multivariate analysis has shown inter factorial associations. Five most important factors identified for metastasis and local relapse have been histology, chemotherapy, lymph node status, age and tumour weight³. Our study found results consistent with previous studies. Few conflicting results were also found highlighting the need for more studies on the tumour from this part of world.

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