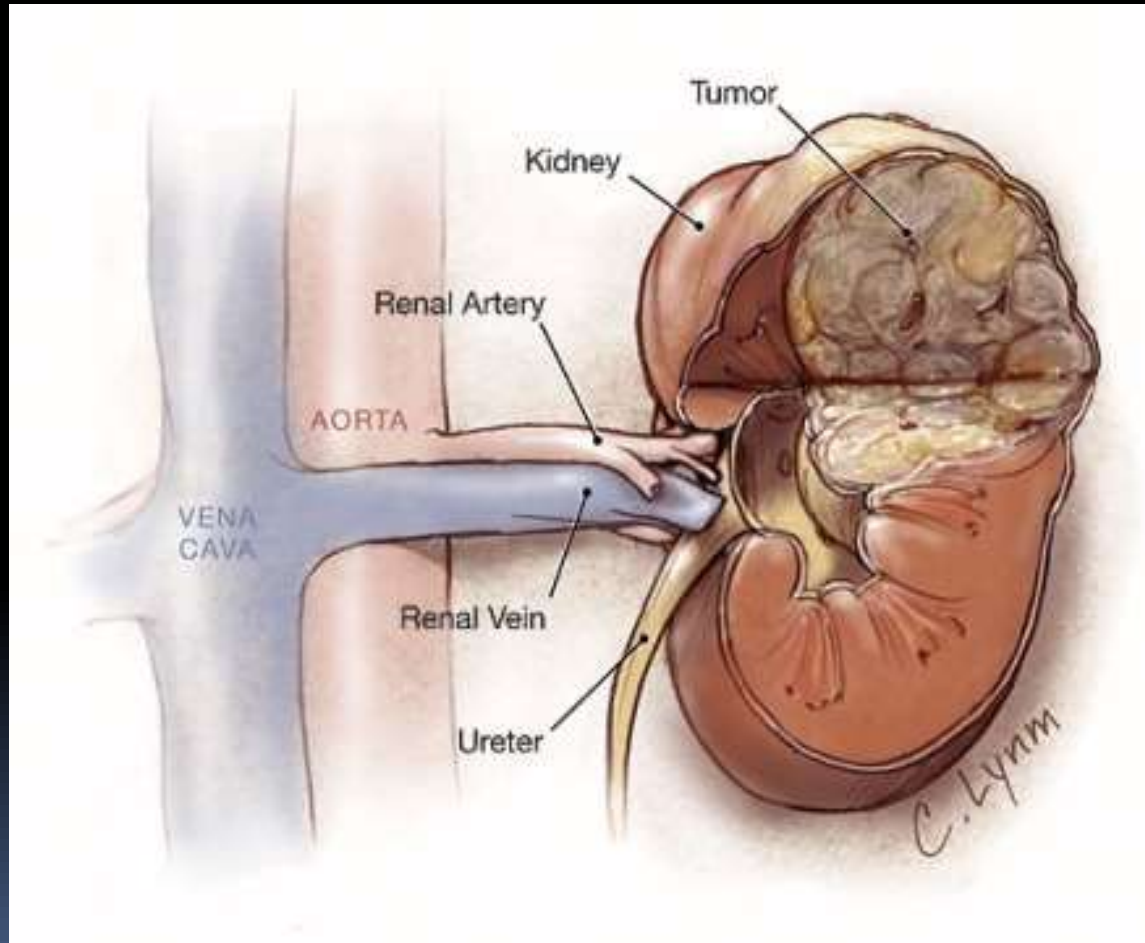


WILM'S TUMOUR

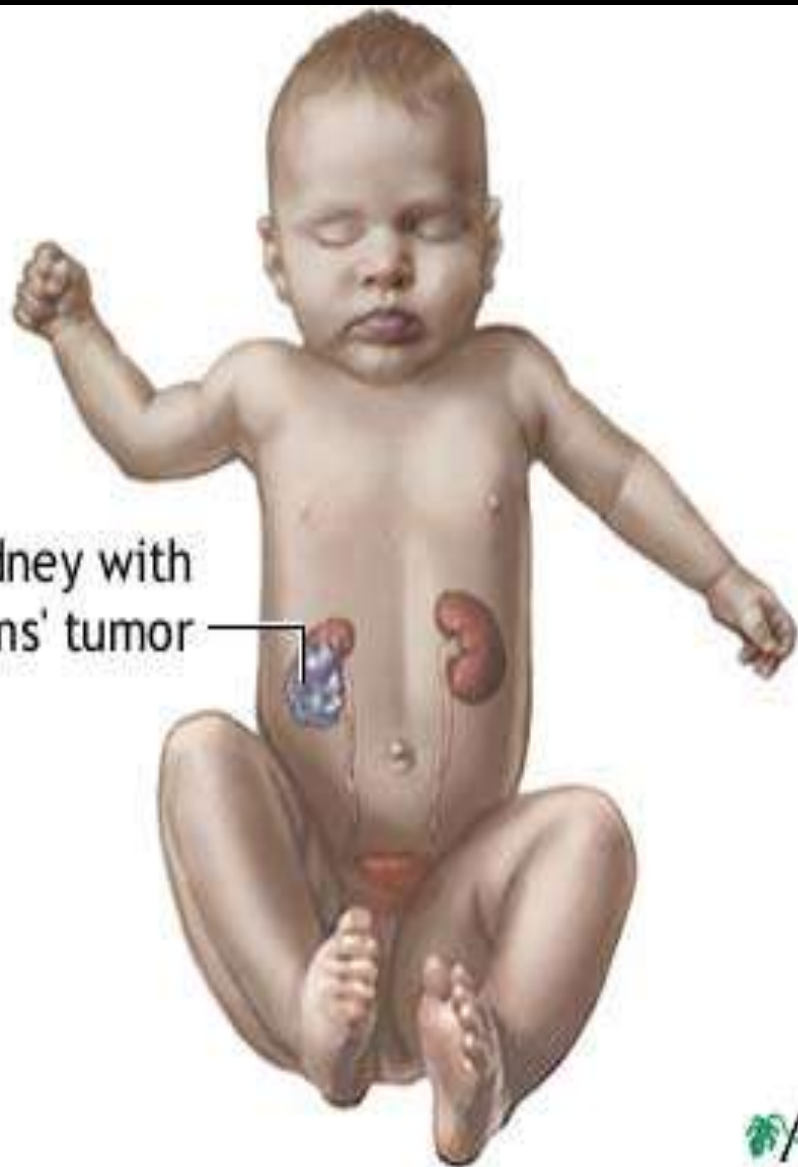




DEFINITION

- Wilm's tumor, or nephroblastoma, is the most common malignant renal & intra abdominal tumor of childhood.
- The peak age at diagnosis is approximately 3 yrs.
- Occurrence is more frequent in boys than girls.
- The disease occurs in about 1 out of 200,000 to 250,000 children.

Right kidney with
Wilms' tumor



Etiology

- Exact cause of this tumor in most children is unknown.
- A missing iris of the eye (aniridia) is a birth defect that is sometimes associated with Wilms tumor.
- Other birth defects linked to this type of kidney cancer include certain urinary tract problems and enlargement of one side of the body, a condition called hemihypertrophy.
- It is more common among some siblings and twins, which suggests a possible genetic cause.

Clinical manifestations

- Abdominal swelling or mass
- Hematuria
- Fatigue/ malaise
- HTN
- Weight loss
- fever



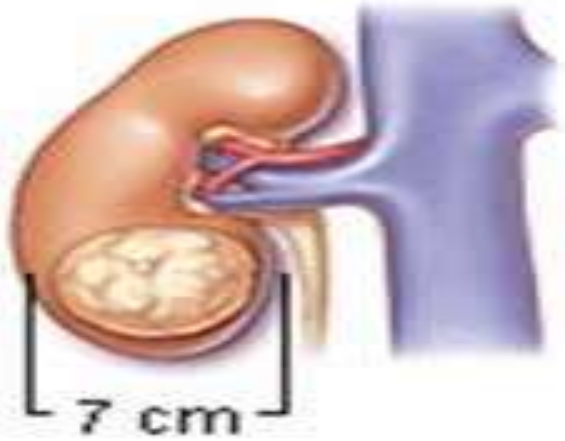
Diagnosis

- Special emphasis is placed on the history and physical exam
- Abdominal ultrasound
- Abdominal Xray
- BUN
- Chest Xray
- Complete blood count (may show anemia)
- Creatinine clearance, creatinine
- CT scan of the abdomen
- Intravenous pyelogram
- Urinalysis

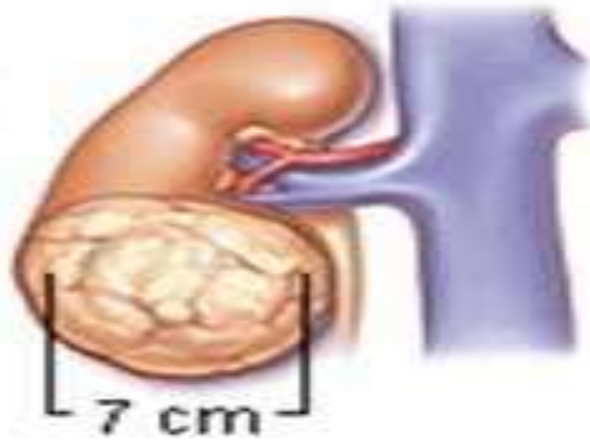
Staging of wilm's tumor

- Stage I: tumor is limited to kidney & completely resected
- Stage II: tumor extends beyond kidney but is completely resected
- Stage III: residual nonhematogenous tumor is confined to abdomen
- Stage IV: hematogenous metastases, deposits are beyond stage III, to lung, liver, bone & brain
- Stage V: bilateral renal involvement

Stage I



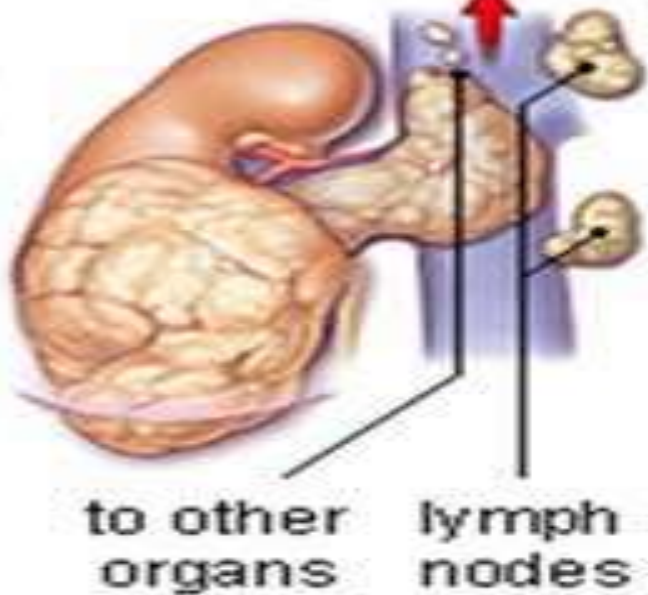
Stage II



Stage III




Stage IV



Management

- Depends upon histological findings, clinical staging & metastasis.
- Stage I & II with favorable histology are usually managed with nephrectomy & chemotherapy for 18 weeks.
- Stage III & IV & V tumors are treated with nephrectomy, abdominal radiotherapy & chemotherapy. For 24 weeks.
- Pre operative radiotherapy & chemotherapy are indicated in massive tumors.

- 
- Chemotherapy is usually administered with
 - vincristine,
 - dactinomycin,
 - actinomycin,
 - adriamycin,
 - doxorubicin &
 - cyclophosphamide.
 - Radiotherapy is not given in children less than 1 yr of age.


Nursing management

Pre operative care:

- Prepare the child & family for all laboratory tests & operative procedures within 24 to 48 hrs.
- Tumor is not palpated unless absolutely necessary, because manipulation of the mass may cause dissemination of cancer cells to adjacent and distant sites.
- Explain benefits & side effects of radiation & chemotherapy.
- Child can be prepared for hairloss.



Post operative care

- These children are at risk for intestinal obstruction from vincristine, radiation induced edema, post surgical adhesion formation, gastro intestinal activity such as bowel movements, bowel sounds, distention, vomiting & pain are carefully monitored.
 - Also monitor BP, urine output, signs of infection, as well as pulmonary hygiene to prevent post op pulmonary complications.
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Thank you

