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## Clinical profile of patients with retroperitoneal Tumours

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### Abstract

The retro peritoneum is an actual space located between the peritoneal cavity and the posterior body wall. The diaphragm serves as the superior boundary, where as the levator muscles of the pelvis delineate the inferior boundry of the retro peritoneal space. Anteriorly this space is bounded by the posterior perietal peritoneum and the spaces between the small and large bowel mesenteries. Posteriorly it is bounded by the vertebral column and the psoas and quardatus lumborum and tendinous portions of the transverses adbominis muscle. General condition of the patient was thoroughly assessed pre operatively. Post-operative antibiotics, fluids and analgesics was given for 5-7 days, sutures were removed from 8-10 days. Patients were followed thoroughly after operations and regular follow up was done. Mass abdomen was found to be the most common symptom (56.6%) followed by pain abdomen 33.3%. In most of the cases mass abdomen was found incidentally. In most of the cases of the pain abdomen pain was dull aching, constant and non radiating.

**Keywords:** Retroperitoneal tumours, mass abdomen, pain abdomen

### Introduction

Retroperitoneal portion of the abdomen has always been considered a difficult region in terms of anatomic definition and clinical evaluations.

Anatomically it has been vaguely considered as occupying the posterior half of the abdomen without well defined facial boundaries.

An organ only partly covered by periotoneum is referred to as retro peritoneal organ.

The retro peritoneum is commonly divided into three spaces by the anterior, posterior renal fascia <sup>[1]</sup>.

The pararenal.space is bordered anteriorly by the parietal peritoneum, posteriorly by the anterior renal fascia and posteriorlaterally by the lateral continuation of the renal fascia. This space contains the pancreas, retroperitoneal portion of the ascending and descending colon. The perirenal space the largest reno peritoneal compartment lies within the anterior and posterior renal fascia and contains kidneys, adrenals, praïmal renal collecting system, and renal hilar vessels <sup>[2]</sup>.

The retro peritoneum is an actual space located between the peritoneal cavity and the posterior body wall. The diaphragm serves as the superior boundary, where as the levator muscles of the pelvis delineate the inferior boundry of the retro peritoneal space. Anteriorly this space is bounded by the posterior perietal peritoneum and the spaces between the small and large bowel mesenteries. Posteriorly it is bounded by the vertebral column and the psoas and quardatus lumborum and tendinous portions of the transverses adbominis muscle <sup>[3]</sup>.

Embryologically ectoderm, mesoderm, and embryonal remnants constitutes the contents of the retro peritoneum. It is therefore; only natural that majority of abnormalities in the retro peritoneum arises from the ectoderm, mesoderm, and embryonal remnants <sup>[4]</sup>.

Owing to its rather extensive size any neoplasm in this area tends to grow unnoticed for a long period of time a. 2 to displace and surround rather than damage adjacent organs. The detection of tumour is often delayed until they are unresectable or attain at least of considerable size. The vast majority of neoplasms of retro peritoneum originate from viscus that have a retro peritoneal location such as pancreas, adrenals, kidney, colon (ascending and descending colon) and duodenum (2nd and 3rd part) only 0.2% of retro peritoneal tumours are primary <sup>[5]</sup>.

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The vast majority of the neoplasm in the retro peritoneum originate from Viscera that have at least partial retro peritoneal location, such as the colon, duodenum, pancreas, kidneys, adrenals, and ureters [6].

Only 0.2% retro peritoneal tumours are considered to be primary-, (ie., not originating from a retro peritoneal organ). Primary retro peritoneal masses are generally derived from mesenchymal or neurogenic cells or from embryonic nests [7].

Primary retro peritoneal tumours usually do not present until they are quite large. This is apparent due to their capacity to grow unimpeded in the retro peritoneal space, before compromising adjacent organ function [8].

**Methodology**

This clinical study of retro peritoneal tumour's cases have been

collected and studied from patients admitted to General Hospital and another Hospital which are teaching hospitals attached Medical College.

Detailed examination of cases done and data entered in proforma sheets for analytical study. All relevant investigations were under taken.

Every effort was done to make accurate pre operative diagnosis in all cases with the help of clinical materials & investigations.

General condition of the patient was thoroughly assessed pre operatively. Post-operative antibiotics, fluids and analgesics was given for 5-7 days, sutures were removed from 8-10 days.

Patients were followed thoroughly after operations and regular follow up was done.

**Results**

**Table 1:** General incidence

Total number of patients admitted to one Hospital	26920
Total number of patients admitted to another Hospital	22032
Total number of patients admitted with Retroperitoneal tumours	30
Percentage of patients with Retroperitoneal tumours among total patients	0.06%

A total number of 48,952 patients were admitted in both General Hospital and another Hospital, during the course of the study. Of these 30 patients (0.06%) presented with retroperitoneal tumours of which 7 cases were primary Retroperitoneal tumours and 23 were secondary retroperitoneal tumours.

**Table 2:** Age Group

Age group (years)	No. of cases	Percentage
0 – 10	4	13.3
11- 20	5	16.6
21 – 30	4	13.3
31 – 40	4	13.3
41 – 50	3	10.0
51 – 60	6	20.0
61 – 70	3	10.0
71 – 80	1	3.0

The age incidence was equally distributed. The incidence of primary retroperitoneal tumours was found to be increased during the 5th decade. Whereas the incidence of secondary retroperitoneal tumours was increased in 2nd to 3rd decade.

**Table 3:** Gender

Gender	Number	Percentage
Male	19	63.3
Female	11	36.7
Total	30	100

Male patients had a higher incidence 1.8: 1 compared to female patients.

**Table 4:** Duration of Symptoms

Duration	Number	Percentage
Below 6 months	15	50.0
6 – 12 months	8	26.6
13 – 18 months	3	10.0
19 – 24 months	2	6.6
Above 24 months	2	6.6

Majority of patients presented within 6 months of the duration of the symptoms (50.0%). Only about 6.6% of the patients

presented relatively late (Above 1 year).

**Table 5:** Symptoms

Symptoms	Number	Percentage
Mass abdomen	17	56.6
Pain abdomen	10	33.3
Haemoptysis	2	6.6
Haematuria	1	3.3
Total	30	100

Mass abdomen was found to be the most common symptom (56.6%) followed by pain abdomen 33.3%. In most of the cases mass abdomen was found incidentally. In most of the cases of the pain abdomen pain was dull aching, constant and non radiating.

**Discussion**

Majority of the patients presented late with symptoms ranging from 61Days to 12 months, this may be due to asymptomatic nature of the disease and partly due to illiteracy and low socio economic status of the patient.

Regarding the treatment we have depended upon surgery alone for cure in relatively few patients. The total number of patients in whom surgery alone is attempted is 14 (40.6%). Majority of our patients presented late with large tumours. In the present study 6 patients (20%) presented at an inoperable stage who were referred to higher centers for further management. Among 14 patients who underwent surgery alone all have come for regular follow up, among 6 patients who were referred to higher centers for radiotherapy, 4 patients were continuing for follow up. Regarding metastasis 6 patients had metastasis in the livers, who were treated with either radiotherapy or chemotherapy. No recurrence occurred after surgery for the cases under study during the above mentioned period.

In our study 30 cases of retroperitoneal tumours were studied for a period of two and a half years, of them primary retroperitoneal tumour were 7 and secondary retroperitoneal tumour were 23.

- Primary retroperitoneal tumours constituted 23.3% of the retroperitoneal tumour 7.
- The common primary retroperitoneal tumour were liposarcoma and common secondary retroperitoneal tumour

were renal tumours of which renal cell carcinoma was the commonest.

- Most cases were presented in the 5th decade with male predominance 1.8: 1.
- Mass abdomen, pain abdomen were important\* clinical findings.
- Radiological evaluation was done in all cases with special emphasis on ultra sound and computed tomography.
- Surgery was done in 86.0% of the cases which was followed by chemotherapy in 10.0% of the cases and radiotherapy in 13.3% of the cases.
- Post operatively all the patients understudy improved considerably and were discharged on the 7th to 10th post operative day. Though retroperitoneal sarcomas are known for recurrence no case was admitted with recurrence during the present study.

### Conclusion

The age incidence was equally distributed. The incidence of primary retroperitoneal tumours was found to be increased during the 5th decade. Whereas the incidence of secondary retroperitoneal tumours was increased in 2nd to 3rd decade

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