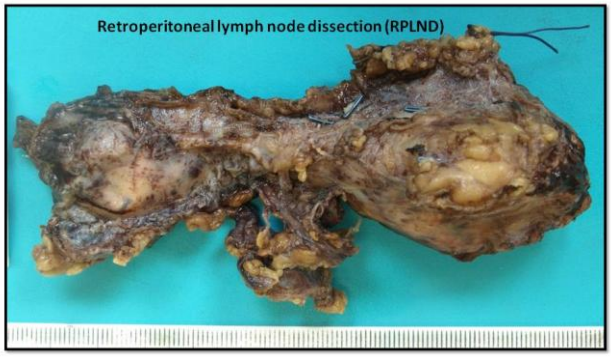
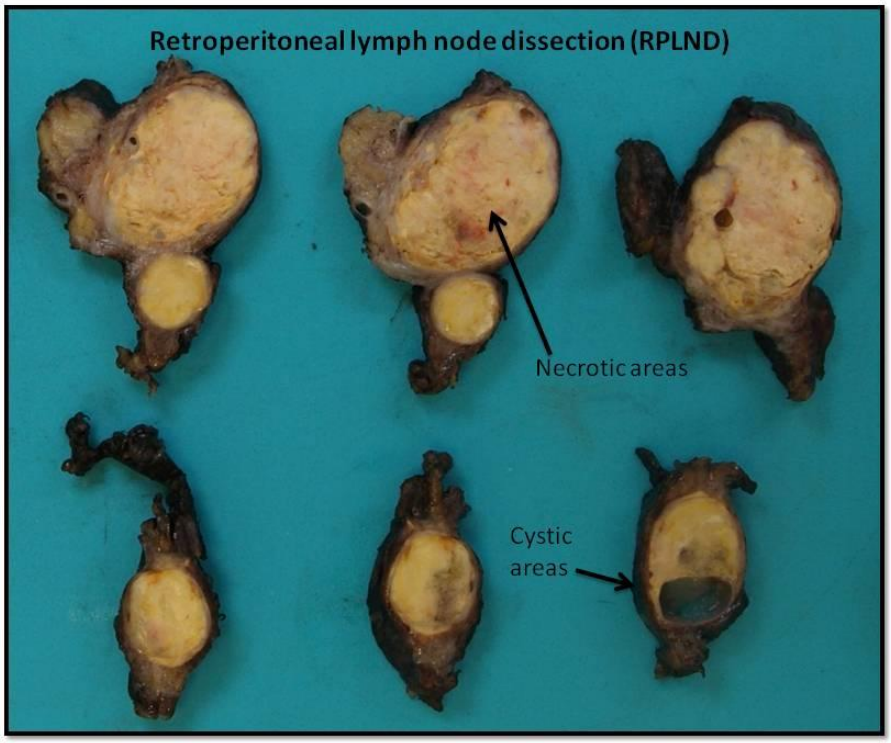
CUT-UP PROTOCOL - Retroperitoneal Lymph Node Dissections (RPLND) for residual masses after chemotherapy for testicular tumours

Background: A complete retroperitoneal lymph node dissection may be performed in patients who have undergone chemotherapy for testicular tumours but often only the involved lymph nodes are removed ('lumpectomy').

(1) **Measure in three dimensions**.

(2) **Ink the surgical resection margins** as completeness of excision is a determinant of outcome. If sent piecemeal then less important.





(3) **Blocks** are selected to represent:

- all areas of the positive node(s) with different macroscopic appearances (solid, cystic, pale or haemorrhagic)
- the minimum distance of the tumour to the nearest inked resection margin
- all macroscopically negative nodes to search for micrometastatic disease.
- State how many nodes are in each cassette to enable counting at microscopy.

For post-chemotherapy residual masses, particularly in the absence of a biopsy diagnosis prior to treatment, it is often useful to **include areas of necrosis** as ghost outlines of the tumour often remain and allow the distinction between seminoma and teratoma.

Reporting:

• Tumour subtype(s).
• Viability of the tumour(s).
• Margin status.

The presence of germ cell elements other than teratoma differentiated, seen in 20–30% of cases, and incomplete resection are independent risk factors for progression. The presence of undifferentiated teratoma has been identified as the single most significant risk factor for progression in patients with complete resections. Patients with teratoma differentiated in their primary orchidectomy are more likely to have an incomplete response and are at higher risk of harbouring teratoma differentiated in residual masses, and therefore viable persistent tumour. However the absence of teratoma differentiated from the primary tumour does not preclude its presence in metastases. The presence of cytologically atypical epithelial or mesenchymal elements in teratoma differentiated is not uncommon in post-chemotherapy specimens and does not alter prognosis. However, if the somatic cells show an invasive pattern, this is indicative of secondary transformation towards a somatic malignancy, which is associatedwith a higher risk than teratoma differentiated alone.

REF: RCPath Dataset at:
http://www.rcpath.org/Resources/RCPath/Migrated%20Resources/Documents/G/g046testisdatasetoct07.pdf