SURGICAL ADVANCEMENTS IN THE MANAGEMENT OF RETROPERITONEAL SARCOMAS

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April 21, 2017
The retroperitoneum is the space posterior (behind) to the region containing the majority of the intestines. It contains the major blood vessels in the abdomen, as well as the kidneys, pancreas, and portions of the intestines.
Anatomy of the Retroperitoneal Spaces: anterior pararenal space (PAS), right perirenal space (RPRS) and left perirenal space (LPRS), posterior pararenal space (PPS), ascending colon (AC), descending colon (DC), pancreas (P), duodenum (D).
• RPS tend to present at large sizes and often require extensive, high-risk operations to remove

• Tumor removal often requires removal of nearby organs at the same time

• Multiple surgeons often needed to perform the operation

• Radiation sometimes used in the OR
TYPICAL RPS TYPES

- Leiomyosarcoma
- GIST
- Liposarcoma
- Variety of other rare tumor types
CLASSIC APPROACH

- Up front surgery
- Open transabdominal or retroperitoneal approach
- Big operations that require lots of planning and can be risky
- Incorporation of new technology in the OR can reduce the risk of surgery
MULTIMODAL THERAPY

- Neoadjuvant therapy (chemotherapy, radiotherapy, immunotherapy) considered for all patients

- Timing and combination of treatment modalities remains in investigational stage for many RPS

- We are heavily involved with the Trans-Atlantic RPS Working Group
LAPAROSCOPY FOR RPS

- Uses small incisions with camera and instruments passed into the body
- Can be considered for smaller tumors
- May be combined with a hand port
CONCLUSIONS

- Surgery for RPS has benefited from improved understanding of disease biology and newer forms of radiation, chemotherapy, and immunotherapy.

- International collaborative groups are helping us to better understand the optimal treatment approaches.

- Newer techniques (minimally invasive surgery) and technologies (advanced hemostasis instruments) are making RPS surgery safer and easier to recover from.