

RETROPERITONEAL SARCOMAS (LITERATURE REVIEW)

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Introduction: Sarcomas are malignant tumors of mesenchymal origin, constituting 1-2% of all solid tumors. Retroperitoneal sarcomas are diagnostically challenging, owing to their diversity and morphological overlap with other tumors arising in the retroperitoneum.

The most common histologic types of RPS are liposarcoma and leiomyosarcoma. Retroperitoneal sarcoma is classified based on the amount of lipid inside the cells, the mucoid lipid and the degree of cell differentiation. Dedifferentiated liposarcoma commonly develops in the retroperitoneum, limbs, testis, and spermatic cord. Retro peritoneal sarcoma typically produces few symptoms until they are large enough to compress or invade surrounding structures. Most tumors are already large and locally advanced at the time they are first detected. Here, we reported a case that came to medical attention as an incidentally discovered large abdominal mass in an asymptomatic or minimally symptomatic, later the mass was successfully removed and free from symptoms. An accurate diagnosis is necessary for correct management and prognostication. Herein, we provide an update on the diagnostic approach to retroperitoneal sarcomas and review their key histologic findings and differential diagnoses. Their prognosis is reserved with a 5-year survival rate

of 36-58%, and the recurrence rate being 50-60%. The basic treatment for TPR is surgery. Purpose of this literature review is to present the diagnostic approach to retroperitoneal sarcomas, as well as the methods of treatment and its prognosis.

Keywords: TPR- retroperitoneal tumor, SRP- retroperitoneal sarcoma.



FIG. 1 Axial MRI revealed a hypo-intense abdominal mass on T1-weighted image (T1WI), and T2-weighted image (T2WI) showed the mass to be hypo-intense but inhomogeneous. The surgically excised specimen which was 14 cm x 12 cm x 10 cm in size

Material and methods: Collected data from scientific specialty literature, that were found in Google Scholar Search, and from published studies on PubMed, Scopus, International practice clinic guidelines. The including criteria was the articles that contained the topic of “Retroperitoneal tumors”.

Results: Were analyzed 38 articles in the period of 2019-2020 that contained the topic of “Retroperitoneal sarcomas”. SRP were localized in 76% of patients in the retroperitoneal perirenal space. The most frequent histological type was liposarcoma, (Fig. 3-B,C) and leiomyosarcoma was found only in 5-10% of cases (Fig.1D, Fig. 2A). The CT scan has a rate of diagnostic accuracy of 97% in the case of TRP (Fig. 1, 2-A,B,C). Usually intraoperative the sarcoma is seen with an irregular contour, being of a high density and affecting the surrounding tissue and neighbor organs. The recurrence rate after combined surgical treatment and chemotherapy or radiotherapy is usually of 14%.

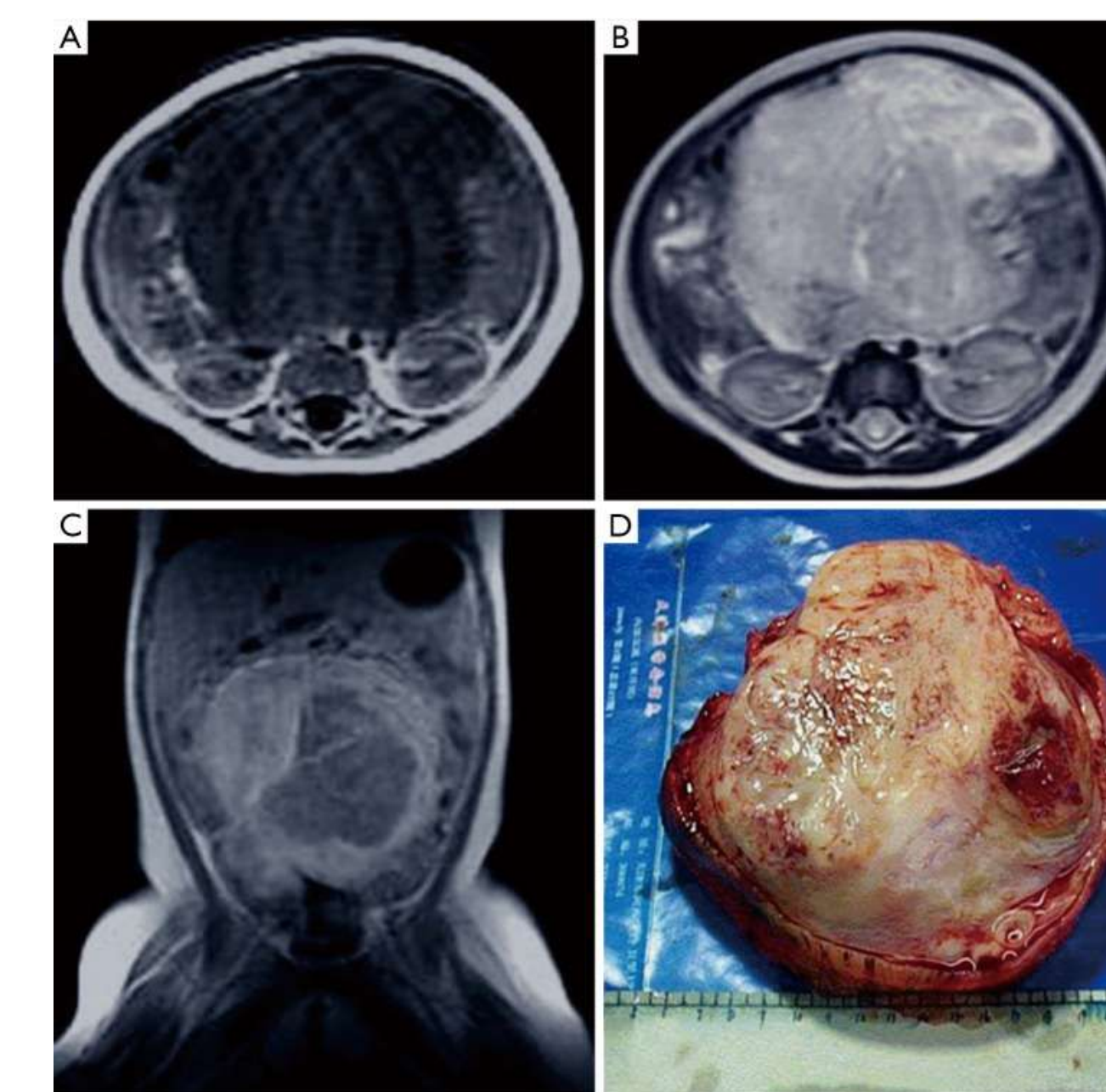


FIG. 2 Axial MRI revealed a hypo-intense abdominal mass on T1-weighted image (T1WI), and T2-weighted image (T2WI) showed the mass to be hypo-intense but inhomogeneous. The adjacent intestinal canal was compressed and displaced. (A,B) Coronal MRI enhancement showed unevenly enhanced abdominal mass (C). The surgically excised specimen which was 14 cm x 12 cm x 9 cm in size (D)

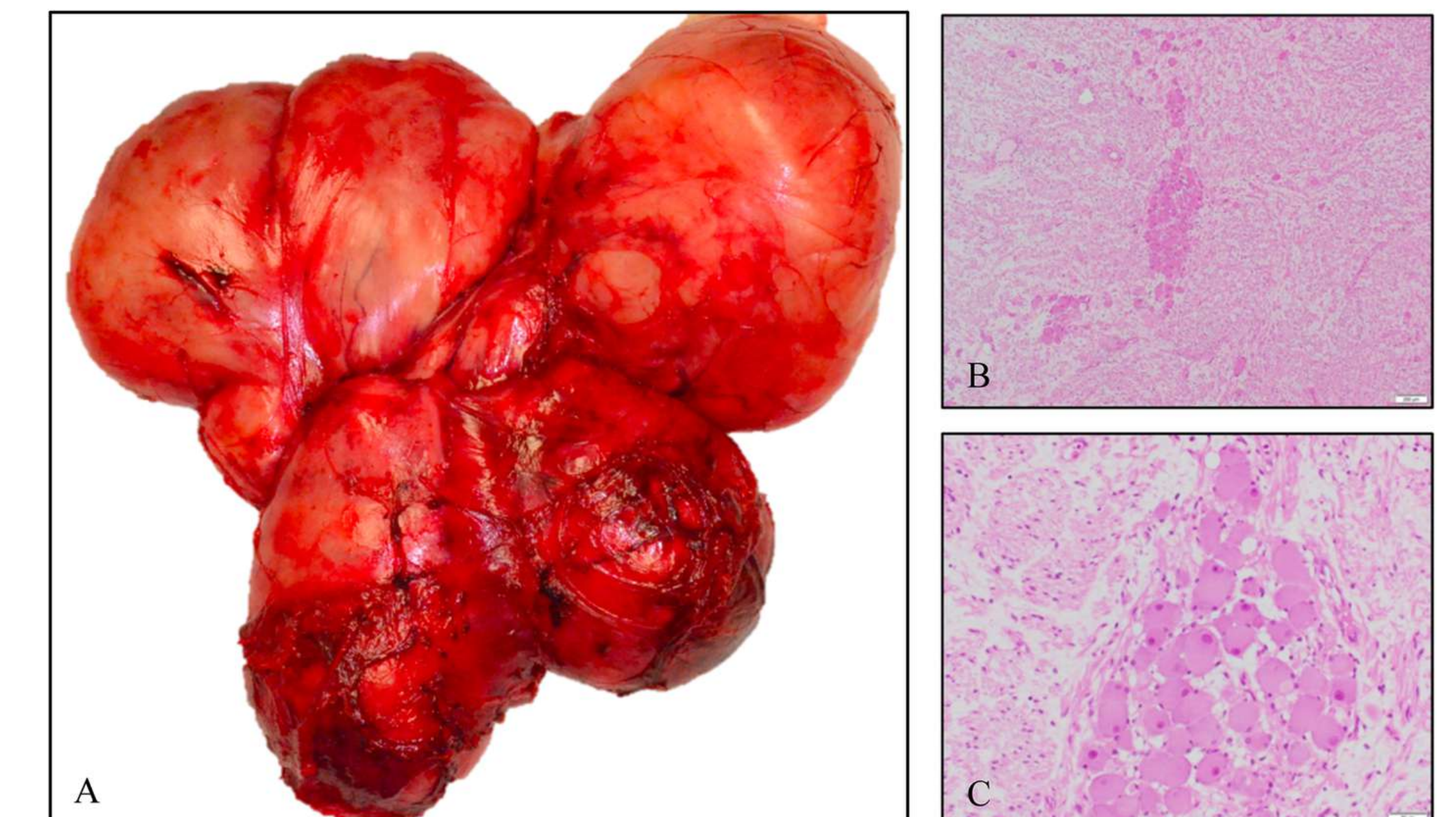


Fig.3 Macroscopic and microscopic findings. a Macroscopic specimen of the in toto resected GN. b, c H&E-stained histopathological images of the central tumor portion with ganglion cells and stromal tissue as well as myxofibrotic and fat tissue in the transition zone. H&E, hematoxylin and eosin staining

Conclusions: Liposarcoma and leiomyosarcoma found only in 5-10% of cases. The CT scan is the gold standard of diagnostics, the 5-year survival rate is of 36-58%, found usually after a surgical, chemotherapy or radiotherapy treatment, with a relapse rate of 50-60%. Radical tumor excision, which is one of the recommended treatments for TPR consists of radical tumor excision and removes as much of the wider normal tissue margin as possible. High-dose radiotherapy might prevent local recurrence and extend survival. The efficacy of neoadjuvant therapy and adjuvant chemotherapy has not yet been determined