

BILATERAL WILMS TUMOR: SURGICAL ANALYSIS IN A SINGLE INSTITUTION

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Background/Objectives

Wilms tumor is the most common solid renal cancer in children under 15 years old, representing approximately 6% of all cancer diagnosis in this age group and still stand as a therapeutic challenge. The aim of this study was to evaluate all bilateral Wilms tumor submitted to surgical procedure using SIOF (International Society of Pediatric Oncology) protocol in the last 18 years of a Brazilian institution.

Methods

The records of patients treated for bilateral tumor, suspected by radiological ultrasound, CT or MR in our hospital for the last 18 years following SIOF protocol. Retrospectively, data collected were composed of age at the surgery, associated conditions, neoadjuvant and adjuvant chemotherapy, radiation therapy, surgical details, pathology results and patient survival.

Results

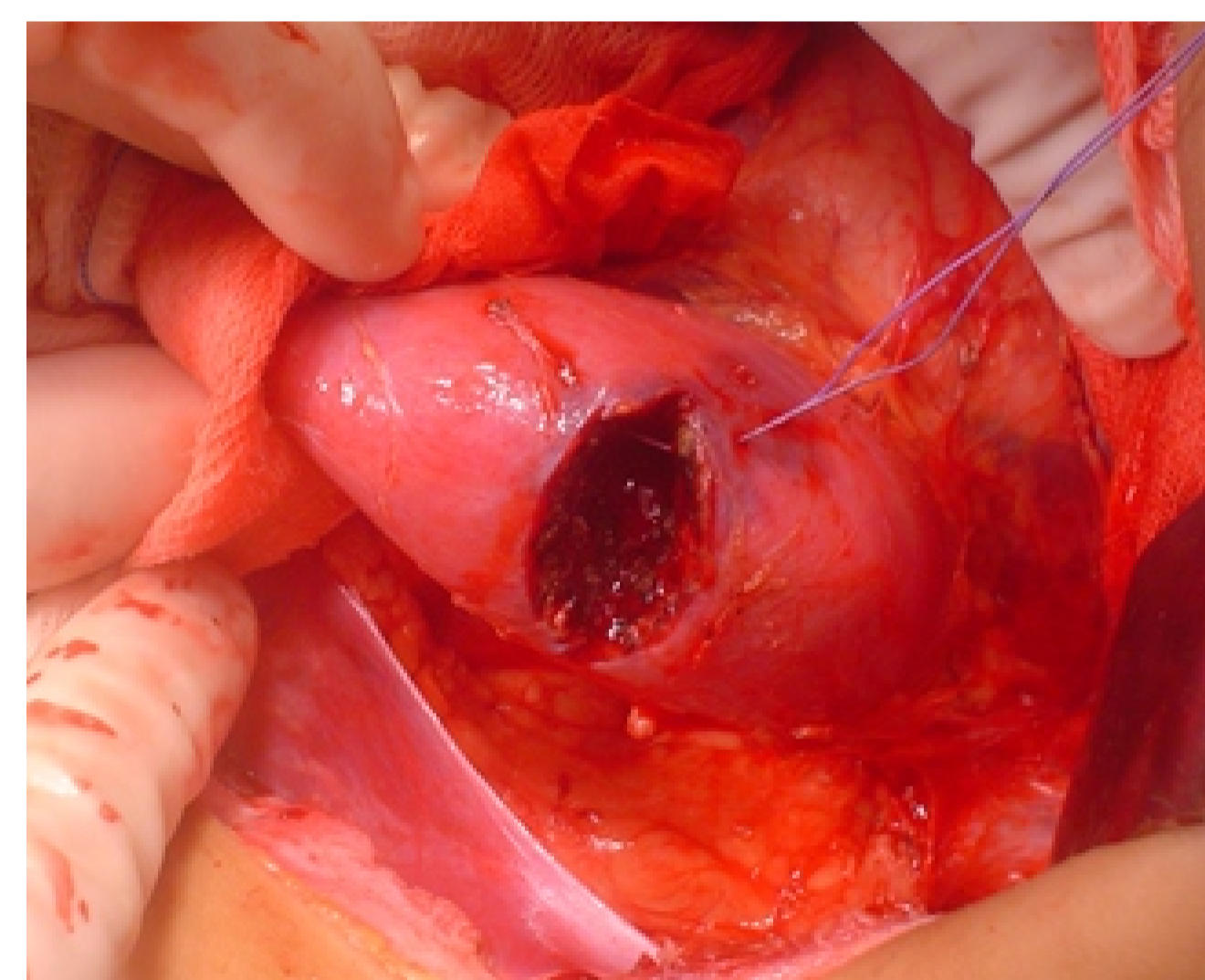
This study was composed by 5 males and 8 females with mean age of 2,5 years. There was one patient with ambiguous genitalia, one with Beckwith-Wiedemann syndrome and one with Von Willebrand disease. Metastasis was detected in lungs of 2 patients. Three patients received radiotherapy for pulmonary metastasis, positive surgical margins or local recurrences. All children were submitted to neoadjuvant chemotherapy and three females did not need adjuvant chemotherapy. Nephron sparing surgery (NSS) was performed in four patients. In only one case occur tumor breakdown. The pathological results showed 6 kidneys with unfavorable histology and 20 with favorable histology. The global survival rate was 76%, one patient still in the treatment with chemotherapy, one changed the city and one is out of therapy possible.

Conclusion

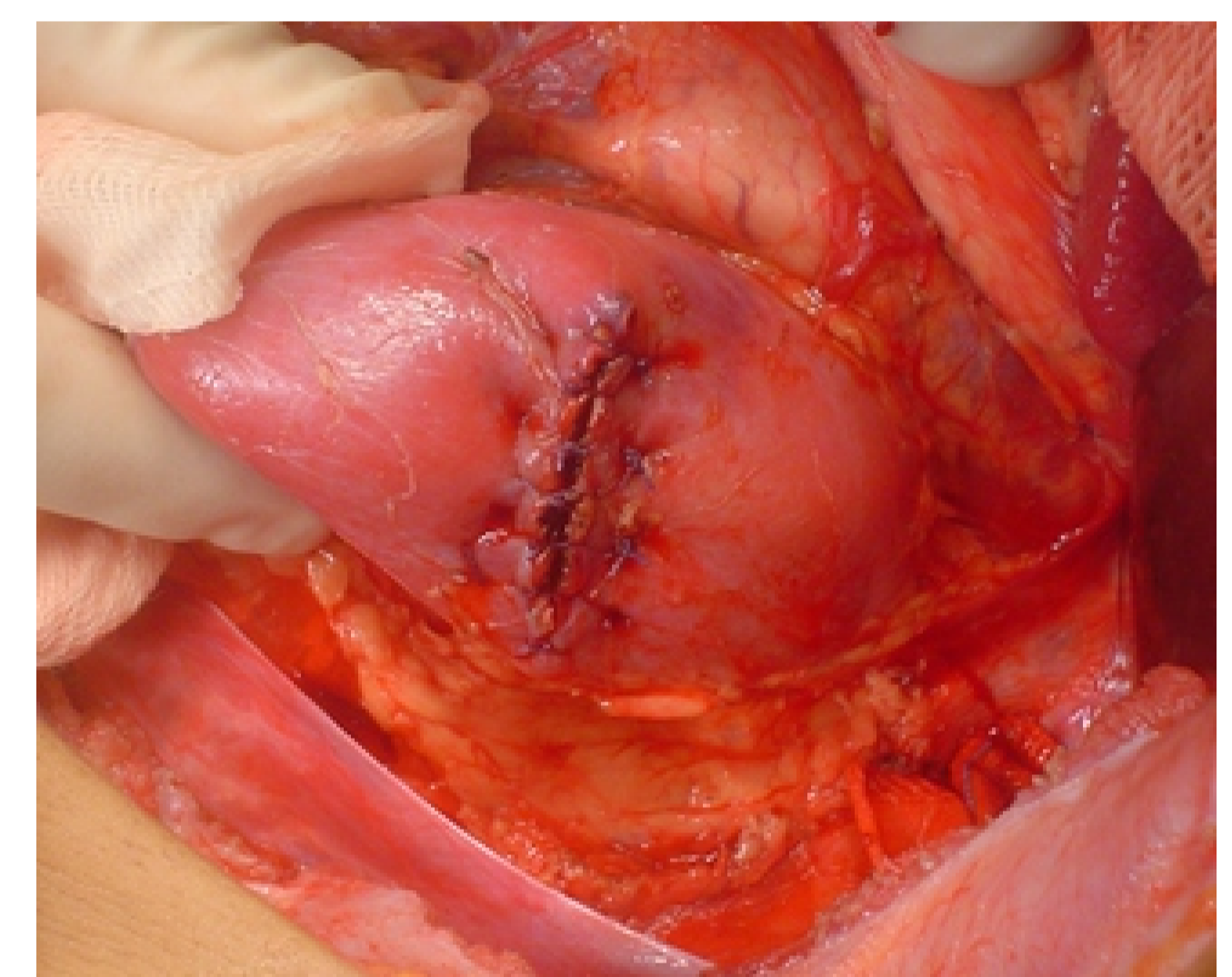
Bilateral Wilms tumor stills a big challenge for pediatric surgeons, even in large cancer treatment centers. NSS could be considered in selected cases with good outcomes and nephron preservation should be the aim while taking positive surgical margin risk on NSS side relying on postoperative chemotherapy and carefully planned radiotherapy to avoid recurrence.



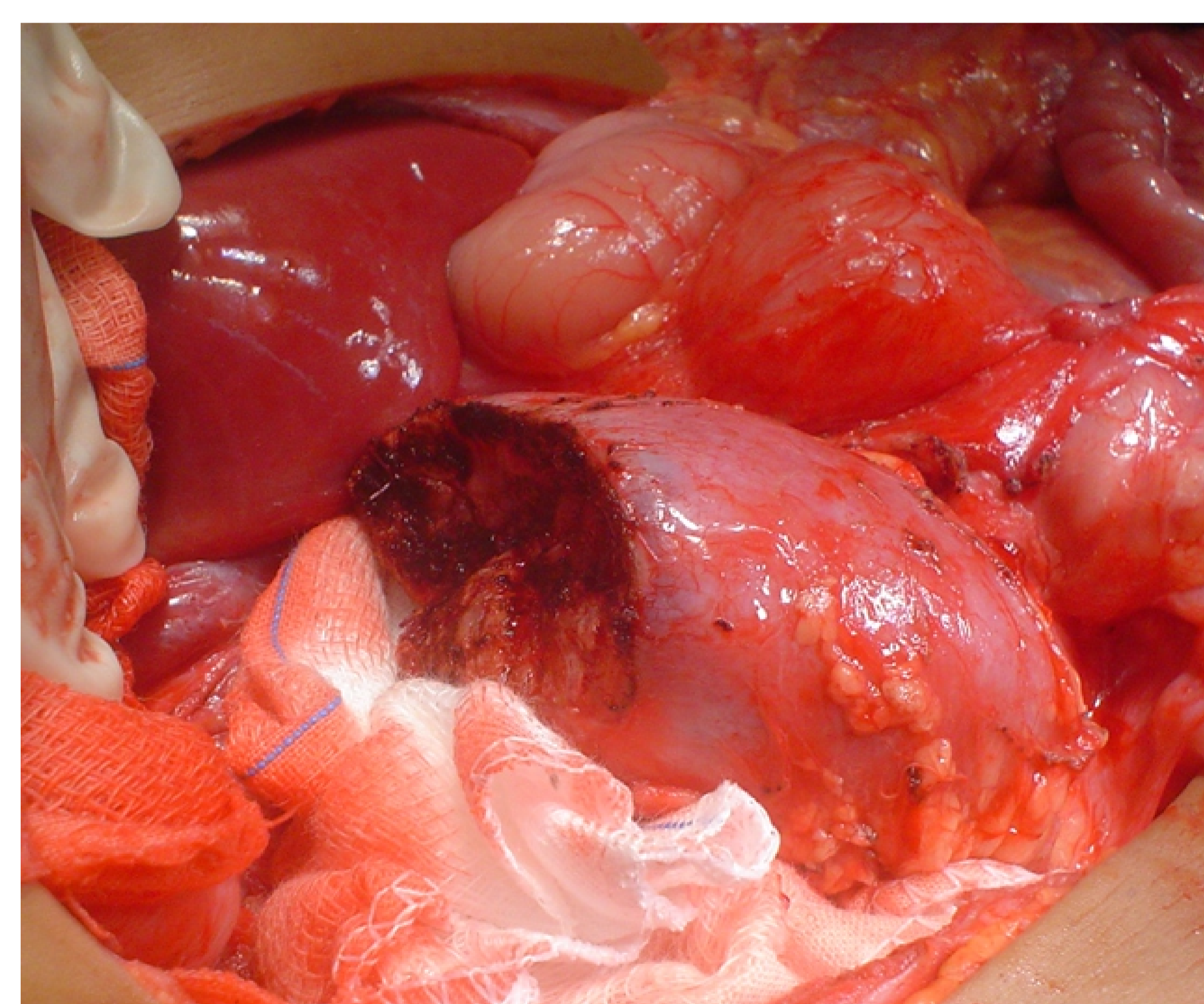
A



B1



B2



C

Figure 1 - A: represents preoperative computed tomography of the abdomen. B1 and B2: represent the NSS procedure in the posterior pole of the left kidney. C: represents de NSS procedure in the upper third of the right kidney.