# SURGERY IN PATIENTS WITH TESTICULAR MALIGNANT GERM CELL TUMORS: COMPLIANCE TO SURGICAL GUIDELINES AND RESULTS IN THE ITALIAN COOPERATIVE STUDY

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## **Purpose:**

Surgery represents a main and often the only treatment in patients with testicular Malignant Germ Cell Tumors (MGCT). We analyzed the compliance to surgical guidelines and the results in a series of patients with testicular MGCT -/+ retroperitoneal node involvement, without distant metastases.

#### **Method:**

42 patients, observed in 15 Centers were enrolled in the Italian Cooperative Study on MGCT (January2004–December2010). 14/42 were younger than 2 y. of age, 28/42 between 13–18 y. Treatment was delivered according to COG-Staging-System: St.I patients (complete excision with inguinal orchifunicolectomy+decrease of markers, +hemiscrotectomy if scrotal involvement) did not receive further treatment; St.II patients (scrotal involvement after hemiscrotectomy and/or retroperitoneal node (RPN) enlargement:<2 cm) received chemotherapy (CT): PEBx3; St.III patients (retroperitoneal node involvement:>2 cm) had RPN Dissection if residuals were suspected after PEBx3or4.

### **Results:**

St.I: 26 patients. 3/26 had a scrotal approach due to suspected testicular torsion: 1/3 underwent hemiscrotectomy, 2 did not receive further therapy after decrease of alphaFP, due to patient's or physician's decision respectively. 3/26 were successfully treated for RPN relapse, occurred at 3,6,9 months after adequate surgery (2 adolescents, 1 infant). St.II: in 4 patients CTwas delivered due to slight enlargement of RPN (+persistent alphaFP in 1). St.III: 12 patients received CT and RPND (bilateral in 1). Histology was negative in 11/12. All patients are alive without disease, 39 in 1stCR, 3 in 2ndCR (f.u 9–86 m.:med.48). 1 St.1 patient suffered from postoperative scrotal hematoma. Among patients younger than 2 y, 10/14 had a pure YST, 12/14 had St.I disease; among those between 13–18 y, 27/28 had a mixed histology, 14/28 were St.II or St.III. In 3 adolescents a testicular prosthesis was positioned during primary operation.

## **Conclusion:**

Outcome was excellent. Regional relapses, observed only in St.I patients, were cured. Surgical guidelines were followed in 40/42 cases. Scrotal approach did not worsen the outcome of patients who did not receive further treatment.

43rd CONGRESS OF THE INTERNATIONAL SOCIETY OF PAEDIATRIC ONCOLOGY (SIOP) 2011 - AUCKLAND, NEW ZEALAND, 28th–30th OCTOBER, 2011

SIOP ABSTRACTS - Pediatr Blood Cancer DOI 10.1002/pbc,

pag. 756; n.: IPSO024