Nephroblastoma

NAME/T.J. AGE/unknown SEX/unknown AREA/Slovakia

<u>Medical History</u>: Grandfather had operation for Grawitz renal tumor, rectosigmoid cancer, and is presently in remission.

Personal History: Child from first pregnancy, p.h. 3170g, length 51cm, Abgar score 10.

Social History: Good

<u>Nutrition and Elimination:</u> Good appetite, urination without difficulty, haematuria, regular bowel movement

Evidence of Abuse: Negative **History of Allergies:** Negative

CHS: A 4 ½ year old patient was admitted to the oncology clinic with a diagnosis of suspicious Morbus Wilms syndrome. 48 hours prior, the kindergarten teacher noticed macroscopic haematuria (blood in urine) and on the following day the mother also observed the presence of haematuria in the boy, without dysuria (painful urination). The patient was then examined by the urologist and subsequently, ultrasound screening indicated a suspicious left kidney tumor. Additional CT examination was carried out with contrast medium administration, confirming a left kidney tumor, possibly with a malignant etiology. The size of the kidneys were 4.5 cm and the tumor was 7.5 cm. Because the tumor originated in the upper region of the kidney, no asymmetry was visible (i.e. bulging of the abdominal cavity), which is one of the most common initial symptoms in this type of cancer in young children.

Preoperative period

The patient was admitted to the Oncology Clinic DfN the following day. Preoperative chemotherapy was administered to localize the nephroblastoma (kidney tumor), according to the protocol from the SIOP 2001 nephroblastoma trial with the drugs 4x Vinkristin, 2x Cosmogen and 3x Aktinomycin. Preoperative chemotherapy was administered to reduce and limit the growth of the tumor because of surrounding critical organ and tissue structures. The administration of chemotherapy for a six week period did not reduce the tumor size. However, the effect was sufficient considering the surrounding area, thus allowing for preoperative preparation. During the administration of preoperative chemotherapy there was an unexpected rapid decrease in leukocytes from the original 8.9 to 1.5 g/L. Because of this low leukocyte level the operation was not possible. Transfer factor, an immunostimulant, was given to the patient after consulting with the doctor. The mother started giving him Rice Bran Arabinoxylan Compound (RBAC). There was a significant rise in leukocytes within a few days, from the original 1.5 to 4.0 g/L. Because of the success of the treatment, the operation for nephrectomy (kidney removal) and epinephrectomy (adrenal removal) was performed on the 7th day of RBAC administration. The transfer factor was administered only once.

Operation

Patient was given general anesthesia. Laparotomy procedure was conducted to remove his left kidney and left adrenal.

Postoperative period chemotherapy

The operation was performed on 21.6.2005 and 21 days later, after reviewing histology results, postoperative chemotherapy was started. Considering the fact that histology results indicated intermediate risk, stage II, the patient

qualified to be included in an internationally coordinated study centered in Amsterdam. By means of random selection, he was placed in the group that received chemotherapy with the lowest dosage of cytostatics (to prevent multiplication of tumor cells) in combination with two drugs, Vinkristin and Cosmogen, instead of the standard combination of 3 drugs. After six weeks of chemotherapy the patient felt sick. According to the child's own words, it was as if the disease had not subsided. Leukocyte values during this period were between 6-9 g/L. After evaluating the clinical condition of the patient, chemotherapy was modified to the standard combination of Vinkristin, Cosmogen and Doxorubicin, administered once per week, followed by an additional Doxorubicin injection over the next six weeks. The strong immunosuppression resulted in a decrease of leukocytes from 6 to 0.8 g/L over the course of less than two weeks. Chemotherapy was subsequently suspended due to leukopenia (significantly low white blood cell count). Starting from this point, RBAC was added to the treatment at the dosage of 1000 mg/day, which was calculated based on a body weight of 15 kg. During the course of the week, the CBC (complete blood count) improved as a result of the rise in leukocytes, enabling chemotherapy to proceed according to schedule. RBAC was not reduced during chemotherapy and thanks to the immunostimulatory effect of the of the nutritional supplement, the child was able to undergo chemotherapy without interruption or delay due to leukopenia. Despite significant immunosuppression during the administration of chemotherapy and RBAC, the child was not overcome by any serious bacterial or viral infection.

RBAC was given to the patient at the stated dosage for a total of nine months, with an obvious positive clinical effect documented by consistent laboratory results.

Reconvalescence period

After the completion of chemotherapy in February 2006, the patient was given RBAC for an additional 18 months in reduced dosages of 500 mg/day. During this period the patient was healthy and attended compulsory preschool without acquiring any bacterial or viral infections.

Final summary

The present case study of an oncology patient whom was administered the nutritional supplement RBAC during and after chemotherapy provides sufficient clinical evidence to support the efficacy of the preparation. The immune enhancing effect of the dietary supplement RBAC, specifically on NK (natual killer) cells and TNF (tumor necrosis factor), enabled the patient to continue with chemotherapy without any delay from accompanying leukopenia. The more than 100,000 times increase in the number of NK cells led the charge against the surviving tumor cells in the patients blood. It can be concluded, based on wide clinical experience backed by laboratory findings, that the combination of RBAC with targeted chemotherapy is a treatment that can be used therapeutically for solid tumors.