

PEDIATRIC GASTROINTESTINAL AND OVARIAN LYMPHOMA: EXTENSION OF THE CLASSICAL KRUKENBERG TUMOR PHENOTYPE

LERNER AARON¹, PACT AVI², BEN-BARAK AYELET³, SAYAR DROR⁴ & BEN-ARUSH MYRIAM⁵

^{1,2}Pediatric Gastroenterology and Nutrition Unit, Carmel Medical Center, Haifa, Israel

³Department of Pediatric oncology, Rambam Medical Center, Haifa, Israel

^{1,5}B. Rappaport School of Medicine, Technion-Israel Institute of Technology, Israel

⁴Haifa 31096 and Hematology Unit, Dana Children's Hospital, Sourasky Medical center, Sakler School of Medicine, Tel –Aviv University, Israel

ABSTRACT

Objectives: Originally, Krukenberg tumor was described as a selective spread of cancer, most commonly in the stomach-ovarian axis, of epithelial tumors, in mid-age or elderly women. The objectives are to describes, for the first time, the youngest three girls with gastrointestinal lymphoma and ovarian dissemination and to expand the non-epithelial krukenberg tumor phenotype.

Material: Three girls, 9, 14, 15 years old, presented with abdominal pains, anemia, elevated acute phase reactants, were diagnosed with terminal ileum, gastric and colonic lymphoma spreading to their ovaries. The youngest girl had liver metastasis and the older one multiple organ spread. The two youngest girls had Burkitt while the 15 years old had large B cell lymphomas.

Results: All were treated by anti lymphoma chemotherapy and only the youngest girl was operated, and bone marrow transplanted. Prognosis is favorable, two are considered cured and one in remission.

Conclusions: The present pediatric cases extend Krukenberg tumor concept, for the first time, to include the pediatric age group and add Burkitt and non-Burkitt lymphoma to the list of non epithelial tumors in the intestinal-ovarian axis. The medical community and especially gastroenterologist, gynecologist and oncologist should be aware of the presently described unique manifestation.

KEYWORDS: Gastrointestinal Tract, Krukenberg Tumor, Lymphoma, Ovary, Pediatric