Multi-drug resistant proteins expression in primary enucleated retinoblastoma eyes versus surgery after conservative treatment

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**Purpose:** To compare expression of multidrug-resistant protein 1/P-glycoprotein (MDR1/Pgp) in retinoblastoma in eyes treated by primary enucleation due to advanced tumor at initial presentation and those enucleated after being resistant to chemotherapy.

**Methods:** This study was a prospective study. Twenty retinoblastoma patients presented to Retinoblastoma Clinic at Ophthalmology Department, Ain Shams University Hospitals. All patients had enucleation and were divided into 2 groups. Patients in group-1 underwent primary enucleation due to advanced tumor at presentation. Patients in group-2 underwent secondary enucleation after failure of conservative treatment. Immunohistochemical studies were performed searching for expression of multidrug-resistant protein 1/P-glycoprotein (MDR1/Pgp) in the two groups.

**Results:** Analysis of the primary enucleation group showed high positive, low positive and negative expression in 1 (10%), 2 (20%) and 6 cases (70%) respectively. In secondary enucleation group: 5 cases (50%), 3 cases (30%) and 2 cases (20%) showed high positive, low positive and negative expression respectively.

**Conclusions:** This pilot study though, not being able to demonstrate statistical significance in MDR1 expression in primary enucleated vs. secondary enucleated resistant cases, demonstrated p-value low enough to indicate a trend for more MDR1 expression in resistant cases (P=0.068). Further study with a larger sample size is warranted.

**Biography**

Hisham AbdEl Dayem is presently working in Ain Shams University, Egypt.