The Influence of Y Matter Derived from Egg Yolk Oil on Liver Cancer (Hepatocellular carcinoma) Cells

Karababa, Ahmet Resul

Kayginer, Hazal

Many investigations have been conducted for years. While these investigations have been focusing on plant derived substances, there has been few studies focusing on animal derived organic substances. In the present study we aimed to investigate the effect of Substance Y Obtained from Yolk, which is derived from animal source and commonly used food, on both Liver Cancer and normal fibroblast cells. In the present study HepG2 liver cancer cells and L929 healthy skin fibroblast cells, which are provided from Sham Institute, Ankara, Turkey, have been used. Cells have been seeded in rectangular prism shaped plastics (Flask) which has 75 cm2 bottom space. In both proliferation and experiment phases, cells have been kept in incubators which have been providing 37 oC temperature and %5 CO2. Viability of cells has been determined by XTT test which depends on the ability of alive cells converting XTT solution to the formazan crystal and determining absorbance of formazan crystals by ELISA microplate reader. It has been observed that substance Y showed concentration dependent cytotoxic effect on both HepG2 and L929 cells. It is important to mention that substance Y showed its cytotoxic effect at very low concentrations and there was no cytotoxic effect on L929 cell at concentrations which showed cytotoxic effect on HepG2 liver cancer cells. Because of it strong cytotoxic effect on cancer cells and partial selectivity of this cytotoxic effect for cancer cells, even if substance Y may not be first line treatment for liver cancer, it can be promising second line treatment which can be combine with conventional treatment agents.

Awards Won: