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Title :	Effet of Resveratrol in the improvement of mice testes abnormalities induced by Cisplatin
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Abstract :	<p>Introduction: Cisplatin is widely used in treatment of many tumors. Cisplatin is cytotoxic and apoptogenic in non-tumour cells and the formation of reactive oxygen species appears to be responsible for these toxicities. Resveratrol (RES) is a powerful antioxidant, that found in many plants, used recently in the treatment of infertility. The aim of this study is to evaluate the protective effect of resveratrol on cisplatin- induced testes damage in adult mice. Materials and methods: 25 Balb/c male (25-30 g) were allocated into 5 groups: control, cisplatin 2.5 mg/kg, cisplatin + RES 20, 50, 100 mg/kg. In control group ,RES solvent (carboxy methylcellulose 1%) was orally administered with gavage for 7 days. In other groups cisplatin was administered intraperitoneally for 5 consecutive days and RES was simultaneously administered by gavage. Mice were sacrificed after 5 weeks and testes were excised. Paraffin sections were prepared and diameters of seminiferous tubules were analyzed following HE staining. Results: Cisplatin after 5 weeks caused widespread testicular atrophy, cytoplasmic vacuolization and loss of differentiating germ cells. After statistical analyzes it found that, diameter of seminiferous epithelia were significantly diminished and the lumen diameter significantly increased in ciplatin groups that it was sign of spermatogenesis arrest in this group. Co-treatment with RES improved the physical signs toward the normal mouse testes and its protective effect was dose-dependent. In conclusion, Resveratrol may be useful to prevent secondary malignancy and to reduce the risk for abnormal reproductive outcomes in cancer patients that exposed to cisplatin.</p>
Keywords :	cisplatin, infertility, resveratrol, seminiferous epithelia, spermatogenesis