1. **Viscum album use in pregnant rats – toxicity and safety evaluation**

**Pharmacology of Traditional Medicine**

**Background:** The incidence of cancer in pregnant women is becoming as common as cervical and uterine cancer, associated mainly due to the postponement of pregnancy. Chemotherapy drugs present a considerable carcinogenic risk to the pregnant woman as well as teratogenicity risk to the fetus. A natural drug, prepared with white berry mistletoe (*Viscum album* - VA) is widely used in Europe as a complementary treatment for cancer, for over 100 years.

**Objective:** The safety of intrauterine fetal exposure to VA was evaluated in a rat model with the objective of gathering further evidence for the safe use of therapeutic doses of VA in pregnant cancer patients.

**Methodology:** 47 pregnant Wistar rats and 399 fetuses bred following exposure to VA were investigated. The rats were randomized into five groups. Control group (CG) received no treatment and stress group (SG) received daily vehicle subcutaneous injections alone in same volume as the treatment groups from day zero until the twentieth day of pregnancy. There were three treatments groups: therapeutic dose group (TG) received the usual therapeutic dose (UTD) of 0.013 mg/kg; high dose group (HG) received 961 times the UTD and very high dose group (VHG) received 1,923 times the UTD, daily.

**Results:** There was found to be gain weight, placentas and fetuses in the therapeutic group and high dose group compared to stress group. Histology of the placentas showed a greater inflammatory process in high dose group and very high dose group.

**Conclusion:** Since no cases of abortion, embryotoxicity, natimortality or teratogenicity were found in the fetuses and histology detected no lesions in the tissues evaluated under therapeutic doses, it is reasonable to conclude that this drug is safe for use in pregnant rats.

**Key words**: *Viscum album*, *in vivo*, cancer, integrative medicine, pregnancy, safety.

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