Methotrexate Induced Gross Malformations in Chick Embryos

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ABSTRACT Methotrexate is a drug that is used to treat rheumatoid arthritis, psoriatic arthritis, Reiter’s syndrome, acute lymphoblastic leukemia, ectopic pregnancy and other conditions. Since methotrexate is well known for its teratogenic effects in humans, the present study is conducted to observe its effect on chick embryos. A single injection of 0.012 mg of methotrexate was injected into the yolk sac of chick embryos on 5th day of incubation. The eggs were sacrificed on 19th day of incubation to see for any gross malformations. The spectrum of gross malformations recorded were stunted growth, scanty feathers, beak deformities, short wings and ectopia viscerale. These findings support the malformations caused by the teratogenic drug methotrexate.