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| **Drug** | **Species** | **Indications** | **Therapeutic Dose** | **Method of Use** | **Contraindications** | **Pharmacology** | **Adverse Effects** |
| Iron Dextran 20% E:\Dr. Diptee Introduction and Lab 1\las\Drugs\IMG_20180904_144244.jpg | Swine | Iron dextran is used in the treatment and prophylaxis of iron deficiencyanemias, primarily in neonatal food-producing animals. | For prevention or iron deficiency anemia in baby pigs (1-3 days of age): 100 - 150 mgof elemental iron IM per pig.For treatment of iron deficiency anemia in baby pigs: 100 - 200 mg of elemental ironIM per pig. May repeat in 10-14 days.  | Disinfect rubber stopper of vial as well as site of injection. Use small needle (20 gauge, 5/8 inch) that has been sterilized (boiled in water for 20 minutes). Injection should be intramuscular into the back of the ham.https://www.drugs.com/vet/images/1094247_1094247.pnghttps://www.drugs.com/vet/images/1094247_1094247.png | Iron dextran is contraindicated inpatients with known hypersensitivity to it, or with any anemia other than iron deficiency anemia.It is also not to be used in patients with acute renal infections, and should not be used inconjunction with oral iron supplements. | Iron is necessary for myoglobin and hemoglobin in the transport and utilizationof oxygen. While neither stimulating erythropoiesis nor correcting hemoglobin abnormalities notcaused by iron deficiency, iron administration does correct both physical symptoms anddecreased hemoglobin levels secondary to iron deficiency.Ionized iron is also a component in the enzymes cytochrome oxidase, succinic dehydrogenase,and xanthine oxidase. | The manufacturers of iron dextran injection for use in pigs statethat occasionally pigs may react after injection with iron dextran, characterized by prostrationand muscular weakness. Rarely, death may result as a result of an anaphylactoid reaction. Irondextran used in pigs born of vitamin E/selenium-deficient sows may demonstrate nausea,vomiting and sudden death within 1 hour of injection. Iron dextran injected IM in pigs after 4weeks of age may cause muscle tissue staining. |