

Iron Dextran and Farbegen Compared as Methods of Preventing Iron Deficiency Anemia in Neonatal Pigs

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Summary

The experiment suggests that a primary need of the neonatal pig is iron and that hematinics such as cobalt and liver extract are of little value if iron is insufficient.

Introduction

Farbegen, a commercially available human hematinic containing cobalt and liver extract in addition to iron, has been merchandized as a superior product to give to baby pigs. We conducted an experiment to compare iron dextran and Farbegen as methods of preventing iron deficiency anemia in neonatal pigs.

Experimental Procedures

Pigs farrowed from 14 crossbred sows were randomly subjected at birth to one of the following treatments: (1) 150 mg. iron dextran; (2) 1 ml. Farbegen (37.5 mg. iron, 5 mg. copper gluconate, and liver extract); or (3) no supplemental iron (negative controls). Pigs were bled within 24 hours after birth and weekly for four weeks to determine hemoglobin (Hb) and packed-cell volume (PCV).

Results and Discussion

As indicated in table 31, the PCV and HB levels of pigs that received Farbegen did not differ significantly from those of the negative controls; however, both groups had values significantly lower than those of pigs that received one injection of iron dextran. The sows were fed and watered in the farrowing crates, and the pigs were able to get some iron from the sows' feed as well as her feces, which probably explains why pigs given Farbegen and negative control pigs did not succumb to iron-deficiency anemia.

Table 31 . Effect of iron treatments on hematology of pigs.

	<u>Iron treatments</u>				Negative controls (no iron)	
	150 mg. Iron dextran		1 ml. Farbegen			
	Hb	PCV	Hb	PCV	Hb	PCV
Birth	8.5	28.0	8.8	29.0	8.6	28.8
1 week	8.4	29.6	7.5	26.3	6.9	24.3
2 weeks	9.5	32.2	7.0	24.6	2.7	25.4
3 weeks	10.1	34.4	6.1	23.3	5.8	22.6
4 weeks	9.7	32.6	6.2	23.7	5.9	22.7

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