past there is always the possibility of resorting to assisted reproductive technologies (follicular aspiration and IVF) or perhaps using the problem breeder as an embryo recipient. In valuable show heifers with no obvious anatomical defects I counsel against the use of reproductive technology as I firmly believe that we should not be perpetuating what may well be genetically related subfertility. If a congenital defect is detected then the decision is much more difficult as it is impossible to know whether the anomaly is genetically based. Certainly animals with uterine unicornis are able to conceive and carry a calf to term.

## Suggested further reading

Drost M., Repeat Breeders In: Cow Manual, Journal of the Society for Theriogenology, Vol XIV pp 47-55. Society for Theriogenology, Hastings, Nebraska. 1987. Wolfe DF., Management of the Repeat Breeder Female, In: Howard JL(ed) Current Veterinary Therapy 2 -Food Animal Practice. pp785 - 790. WB Saunders Co, Philadelphia. 1986. Roberts SJ., Veterinary Obstetrics and Genital Diseases. 3rd ed., Woodstock, VT: published by the author, 1986. Farin PW and Estill CT., Infertility due to Abnormalities of the Ovaries in Cattle. Veterinary Clinics of North America: Food Animal Practice. 9:2:291 -308 (1993). Youngquist RS and Braun WF., Abnormalities of the Tubular Genital Organs. Veterinary Clinics of North America: Food Animal Practice. 9:2: 309 -322 (1993).

## Abstract

## Conservative and surgical treatment of tibial fractures in cattle

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Ninety-five cattle with tibial fractures, all but one with a unilateral fracture, were examined between 1990 and 1994. The feasibility of repairing the fracture was assessed radiographically, also taking into account the bodyweight and value of the animal. Twenty-two cattle were slaughtered. Conservative treatment with stall confinement and/or a splint or cast was applied in 18 cases, with satisfactory results in eight of them (44 per cent). They were fattened to normal bodyweight, but they all had a severe deformity of the affected leg. In 55 animals, the fractures were fixed externally with Steinmann pins and methylmethacrylate bridges under image-intensified fluoroscopy. Ten of them could not bear weight on the affected leg and were slaughtered before the pins were removed. In the remaining 45 animals the pins were removed after a mean (sd) period of 71 (14) days. Four animals re-fractured the affected leg shortly after the pins were removed and six others were slaughtered prematurely because of inadequate weight bearing. The results were successful in 35 cases (64 per cent). Slight deviations of the affected leg and/or the contralateral leg were often observed. The overall survival rate of the cattle with tibial fractures was 45 per cent.