Review https://doi.org/10.61900/SPJVS.2023.02.09

THE USE OF PLATELET-RICH PLASMA TO IMPROVE IN VITRO EMBRYO PRODUCTION AND IMPLANTATION RATE IN MAMMALS

Silviu-Ionuț Borș

Research and Development Station for Cattle Breeding, 707252 Dancu, Iași, Romania

bors.ionut@yahoo.com

Abstract

It has been demonstrated that platelet-rich plasma (PRP), a preparation of plasma enriched with a platelet level above the baseline, is essential for the process of tissue regeneration. Over the past ten years, PRP has drawn more attention as an unusual form of therapy. Applications of PRP in animals have demonstrated varying degrees of efficacy in treating a wide range of medical conditions, ranging from ovarian insufficiency to musculoskeletal ailments. Although there are currently few therapeutic PRP uses in farm animals, the encouraging findings of a number of research will likely lead to a rise in interest in PRP use among farmers and veterinarians. In animal reproduction, PRP can be used to enhance follicular growth, oocyte competence, and the uterine environment to boost the implantation rate of the embryos.

Keywords: mammals, reproductive medicine, platelet-rich plasma, embryos