



International VETEXPO-2019 Veterinary Sciences Congress
September 20-22 2019. Double Tree by Hilton Hotel, Avcilar /Istanbul, Turkey

Oral presentation

Polymorphonuclear leukocyte isolation from venous blood of the dog

Gunes Karakurt*¹, Kader Yıldız²

1. Kırıkkale University, Graduate School of Health Science, Department of Parasitology 2. Kırıkkale University, Faculty of Veterinary Medicine, Department of Parasitology

Abstract

The aim of the current study was to neutrophil isolation from venous blood samples of healthy dogs. Venous blood samples were obtained from Venae cephalica of clinically healthy dogs (n:5) into heparinized tubes. The blood samples (2 mL) and Percoll dilutions (45%, 54%, 63%, and 72%) prepared with Hanks Balanced Salt Solution (HBSS) were layered into sterile tubes. After centrifuge, the polymorphonuclear leukocytes (PMN) were aspirated between 63% and 72% interfaces of the Percoll dilutions into tubes. The samples of PMN observed under light microscopy. Viability was detected microscopically after stained with trypan blue dye. Diff-Quick staining was used to detect neutrophil purity of the isolated PMN. In the present study, the neutrophils ratio was calculated as 92% of the isolated polymorphonuclear cells. The neutrophil viability was calculated as 98% of PMNs isolated from the venous blood samples of healthy dogs. In the present study, the Percoll gradient centrifugation (72%, 63%, 54% and 45%) is fast technic for isolation of the neutrophils from venous blood samples of dogs.

Keywords: dog, venous blood, polymorph nuclear leucocyte, neutrophil, isolation

This study was financially supported by Scientific Research Coordination Unit of Kırıkkale University (Project code: 2017 / 080).

*Corresponding Author: Gunes Karakurt
E-mail: gunes_karakurt@hotmail.com

VETEXPO-2019 homepage: <http://vetexpo.org/>
Journal homepage: <http://dergipark.gov.tr/>



This work is licensed under the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).