نقد بر: میکروپارتویکل‌های مشتق از پلاکت در دو محیط مختلف پلاسما و کمپوسول

حسن منصوری طرقبه

این جانب با اعمال مقالات سرکار خانم شیما آزادپور و همکاران، را که در فصلنامه خون به چاپ رسیده است، مطالعه نموده‌اند. نویسندگان در این تحقیق به بررسی اثر دو محیط مختلف نگهداری پلاکت‌ها (کمپوسول و سپی فلای) بی‌روز‌وز بندی میکروپارتویکل‌ها در طی روز نگهداری که نمایانگر یک‌پارسیدنی‌اند. نتایج نهایی حاکی از این‌گونه تولید کمبودیک که از میکروپارتویکل در محیط کمپوسول دارد. این جانب مقاله در حکایت می‌باشد به دلیل داشتن نیاز به کمک این تحقیق.

References:
Commentary on: Generation of platelet-derived microparticles during storage in two different storage media

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I read with interest the article by Azadpour Sh. et al. that has been published in Sci J Iran Blood Transfus Organ(1). The authors have surveyed the effect of two various storage platelet media (Composol & CPDA) on production of platelet microparticles (MPs) during 7 days. The final results have given an idea about lower production of microparticles in Composol medium. In this regard, there are points I would like to raise:

1- In the current survey the authors have a determinate quantity of MPs in CPDA plasma and Composol using Bradford method. The Bradford method is a known technique in protein assay by spectroscopic analytical procedure for determination of concentration of protein in solutions (2). It measures total proteins level in solutions and does not detect the level of MPs. The authors have cited measuring this method by adhering to the paper of Horstman LL and Ahn YS (3), but surprisingly there is no reference to this method in the current article for detection of MPs.

2- The gold standard for MPs level determination is flowcytometry technique that is feasible in Iranian Blood Transfusion Organization and has been missed in the current survey. In other words the authors have measured the total protein in platelet bags having been stored in the two various media.

3- The Bradford technique is linear typically from 0-2000 µg/ml range and for higher concentration of proteins making dilutions is necessary for analysis (4). The amount of proteins at day 7 has been above 2000 µg/ml, but the authors have not cited any samples diluted for the correction of results.

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