

RESPONSE TO REVIEWER

Thank you very much for your kind advices. Here we provide some answers to reviewers' suggestions:

1. In comparison between RRD and normal controls, Mann-Whitney U test should be applied, but not t-test.

Responses:

- In the initial manuscript that we sent, we chose the t-test because it refers to the results of the data normality while the Mann Whitney U test has not been carried out.
- Furthermore, we have done statistical data analysis using the Mann-Whitney U test according to the reviewers' suggestion, the results shown on table 2 (red mark).
- The differences between t-test and the Mann Whitney U test that we got include:
 - In the t test, we got the result that Vitreous VEGF-A levels had a significant difference between RRD patients compared to control ($p=0.009$). Meanwhile, in the Mann Whitney test, the results were not significant ($p=0.196$).
 - The results of serum PDGF-AA levels on the t test, showed that it was not statistically significant ($p = 0.644$) while the Mann Whitney test showed a significant result ($p = 0.048$).
 - Actually, it already known based on scientific literature that RRD is a local condition of the eye, so that the vitreous VEGF-A and PDGF-AA levels should have higher in RRD patients than control, whereas serum VEGF-A and PDGF-AA levels do not significantly affect systemic outcome. Because, the systemic VEGF-A and PDGF-AA levels are mostly influenced by systemic factors that represent all organs. Therefore, we think that the t-test results were more related to the disease pathomechanism. However, we still hope any kind input about the content and improvement of this manuscript part from reviewers.

Table 2. VEGF-A and PDGF-AA levels → T-test

Variable	Group	Level (pg/ml)	P
VEGF-A Vitreous	RRD	131.71±58.25	0.009*
	Control	88.47±56.95	
VEGF-A Serum	RRD	706.20±185.29	0.789
	Control	674.34±360.12	
PDGF-AA Vitreous	RRD	174.62±65.17	0.0001*
	Control	33.15±19.51	
PDGF-AA Serum	RRD	751.58±129.27	0.644
	Control	657.72±840.54	

Notes: The data are expressed as mean±SD. *significant difference between RRD and control group using Independent T-test ($P<0.05$).

Table 2. VEGF-A and PDGF-AA levels → Mann-Whitney U test

Variable	Group	Level (pg/ml)	P
VEGF-A Vitreous	RRD	131.71±58.25	0.196
	Control	88.47±56.95	
VEGF-A Serum	RRD	706.20±185.29	0.762
	Control	674.34±360.12	
PDGF-AA Vitreous	RRD	174.62±65.17	0.001*
	Control	33.15±19.51	
PDGF-AA Serum	RRD	751.58±129.27	0.048*
	Control	657.72±840.54	

Notes: The data are expressed as mean±SD. *significant difference between RRD and control group using Mann Whitney U ($P<0.05$).

2. What are pericidal glial cells described in Discussion? The authors should explain more.

Response:

→ We made a correction on this sentence: “PDGF is a mitogen and chemo-attractant for RPE cells and retinal and pericidal glial cells, where the expression in the eye increases after RD” □ become “PDGF is a mitogen and chemo-attractant for RPE cells, retinal glial cells and pericidal cells (The cell that involved in the formation of aneurysms due to weakness and discontinuity of the capillary blood vessel walls), where the expression in the eye increases after RD.”

2.1.1 Microaneurysms

Microaneurysms is the first clinical finding of DR. It is developed from retinal capillaries and is usually found in occluded capillary areas. They have 12-125 microns diameter. Small aneurysms occur as a result of weakness and disconnection in capillary walls caused by the loss of pericide cells. While microaneurysms are stained, bleeds are not stained in fundus fluorescein angiography (FFA).¹⁴⁻¹⁷

2.1.2. Intra Retinal Hemorrhages

Rupture of microaneurysms, decompensated capillaries and IRMAs cause retinal hemorrhages. Their clinical appearance varies from place to place in retina. The outer plexiform and inner nuclear layers have rounded and paw shaped hemorrhages, while the hemorrhages in superficial layers of nerve fibers are seen as flames. These hemorrhages are absorbed between 6 weeks and 4 months.¹⁴⁻¹⁷

→ (Kurt et al., 2017) :

Kurt, F., Arıkan, H., Karadoğan, S., Karakuş, H., Kağıtılı, E. N., & Kılıç, R. (2017). Pathogenesis and treatment of diabetic retinopathy. *Ahi Evran Tıp Dergisi*, 1(1), 1–7. <https://dergipark.org.tr/en/pub/aemj/321090>

3. The authors do not need to show the abbreviation of PVR again in discussion section.

Response:

We've already dismiss the abbreviation of PVR in discussion section.

4. Several grammatical errors are seen in the manuscript, which should be amended.

Response:

We have done an extensive language editing by ENAGO through this link:
<https://www.karger.com/Resources/Authors>. Assignment number: ANDIGW-1.

If you have any suggestion, please do not hesitate to inform us.

Sincerely,

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