Immune response of condyloma acuminatum after 5-aminolevulinicacid-photodynamic therapy treatment

Yiu-Tai Li¹, Wen-Ling Lee¹,², Peng-Hui Wang¹,²,³,⁴,⁵,*

¹Department of Obstetrics and Gynecology, Kuo General Hospital, Tainan, Taiwan, ROC; ²Department of Medicine, Cheng-Hsin General Hospital, Taipei, Taiwan, ROC; ³Department of Nursing, Oriental Institute of Technology, New Taipei City, Taiwan, ROC; ⁴Department of Obstetrics and Gynecology, Taipei Veterans General Hospital, Taipei, Taiwan, ROC; ⁵Department of Obstetrics and Gynecology, National Yang-Ming University, Taipei, Taiwan, ROC; ⁶Institute of Clinical Medicine, National Yang-Ming University, Taipei, Taiwan, ROC; ⁷Department of Medical Research, China Medical University Hospital, Taichung, Taiwan, ROC

DEAR EDITOR,

We read with much interest for the article entitled “Macrophages participate in the immunosuppression of condyloma acuminatum through the PD-1/PD-L1 signaling pathway,” which has been published in the May issue of the Journal of the Chinese Medical Association (JCMA).¹ The authors found that more M2-like macrophages than M1-type macrophages were present on wart lesion.¹ It is not surprising to see this report, because M1-like macrophages than M1-type macrophages were present and after ALA-PDT treatment, we are wondering why the absolute number of M1 or M2 macrophages is decreased after ALA-PDT treatment. We totally agree that “as similar to the concept of tumor infiltrating immune cells, the immune cells might be ineffective in the clearance of “abnormal” and/or “disease” status. However, after treatment, the dysfunction of the immune systems cannot be restarted to the “functional” ability, the therapeutic effect might be in vain. That is why we applaud the success of Dr. Liao’s excellent works to highlight the importance of the immune check points PD-1/PD-L1 (programmed death-1/programmed death ligand 1) signaling pathway.¹ A recent study showed that the timing of evaluation might be important. Xie and colleagues found that at 4 hours after ALA-PDA treatment, CD4+ cells increased, accompanied by increased levels of mRNA expression of INF-γ, and para-doxically, CD4+ and mRNA expression levels of INF-γ were decreased at 24 hours after ALA-PDA treatment,¹ hinting that the evaluation of the inflammatory markers and/or immune responses should consider the “time course” after treatment. We hope to see the positive response by the authors.

ACKNOWLEDGMENTS

This study was supported by grants from the Ministry of Science and Technology, Executive Yuan, Taiwan (MOST 106-2314-B-075-061-MY3), and Taipei Veterans General Hospital (V108C-085).

REFERENCES