

Review of: "Aspirin-triggered resolvin D1 reduces parasitic cardiac load by decreasing inflammation through N-formyl peptide receptor 2 in a chronic murine model of Chagas disease"

Undurti Das

Potential competing interests: The author(s) declared that no potential competing interests exist.

Interesting study. In this work the authors showed that resolvin D1 is useful in the treatment of Chagas disease and protects the heart. BUT obviously more data is needed. Some of my comments are as follows:

1. Authors should have studied the effect of polyunsaturated fatty acids in Chagas disease. Are the plasma or tissue concentrations of PUFAs reduced or increased in Chagas disease?
 2. PUFAs are known to have cytotoxic action on many parasites including Malarial parasite. Is it possible that PUFAs can kill Trypanosoma also?
 3. If so which of the PUFAs are the most effective?
 4. Then the question comes which metabolites of the most effective PUFA(s).
 5. Is it possible that other types of resolvins (Resolvins of E series), protectins, maresins and lipoxins are also effective against Chagas?
 6. PUFAs can suppress IL-6 and TNF, so one would expect PUFAs are also useful to prevent inappropriate inflammation in Chagas disease.
 7. What is the tissue distribution of resolvin D1 in Chagas disease. Is resolvin D1 present in myocardium and if so, is it decreased in Chagas disease.
 8. If resolvin D1 is injected, will it reach myocardium? what are the PK and PD of resolvin D1.
 9. What is the half-life of infused or injected resolvin D1?
 10. Are there any adverse effects of infused or injected resolvin D1.
 11. Resolvin D1 is unstable and so how can it be stabilized for human use.
 12. What are the methods of enhancing endogenous production of resolvin D1.
- and I have several other questions?.....?.....