







Epicardial adipose tissue is increased in HIV infected adolescent and young adults

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Introduction

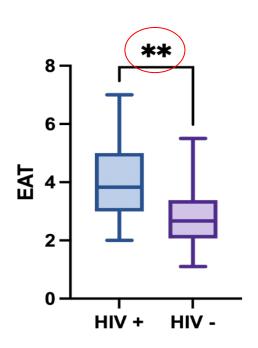
- The association between antiretroviral therapies in HIV positive subjects and the cardiovascular risk is already known in literature.
- To date, there are few studies investigating this association in adolescents and young adults with vertically transmitted HIV; it appears to be urgent to stratify as earlier as possibile cardiovascular risk in these patients.

Methods

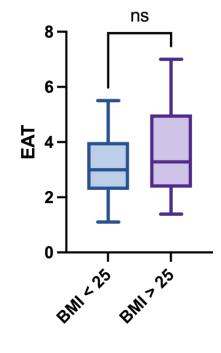
- In our study we enrolled 20 (mean 20 years, 10 male) vertically transmitted HIV patients aged at least 14 years with good immunovirological control.
- They underwent echocardiography with the evaluation of the following parameters: biventricular systolic function (LVEF, RVEF); biventricular global longitudinal strain (LVGLS, RVGLS); left ventricular diastolic function (E / A-MV, E / e ', TR, BSA); epicardial adipose tissue (EAT).
- The cohort thus identified was compared with a cohort of HIV-negative healthy controls matched for age and sex.

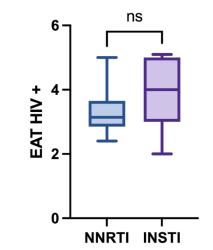
Results

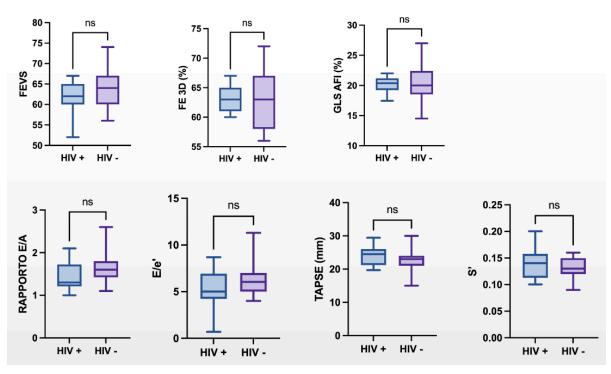
Comparing HIV infected cohort to healthy controls, no statistically significant differences emerged except for the EAT, which appears to be greater in the HIV infected cohort, although the values detected are within normal limits.



Using Sperman's linear correlation statistical function we evaluated whether the parameters of BMI, age and gender were related to EAT: no correlation was identified.







Conclusion

Our study revealed an increased thickness of EAT in the HIV infected cohort, while remaining within the normal range. Further data are needed to support these preliminary

References

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- S. Srinivasa et al., "Epicardial adipose tissue volume and cardiovascular risk indices among asymptomatic women with and without HIV," Antivir. Ther., vol. 23, no. 1, pp. 1–9, 2018, doi: 10.3851/IMP3193.