O-072

PROGNOSTIC VALUE OF TILS (TUMOR INFILTRATES LYMPHOCYTES) AND PET IN PLEURAL MALIGNANT MESOTELIOMA: RETROSPECTIVE ANALYSIS OF MONOCENTRIC EXPERIENCE

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Objectives:
Malignant pleural mesothelioma (MPM) is a relatively rare but aggressive cancer with poor prognosis. A therapeutic gold-standard doesn't exist, so the treatment is nowadays object of randomized clinical trials. A high SUV (standard uptake value) at preoperative positron emission tomography (PET) is a prognostic value of worse prognosis. The histological analysis of tumor-infiltrating lymphocytes (TILs) has increased importance in different cancers, for prognostic value and for immunotherapies. In MPM it's not known if SUV is higher in case of high lymphocytic concentration (TILs) in tumoral tissue. This kind of analysis was conducted in different studies with no clear evidence of a prognostic value of lymphocytes assessment. The aim of this study is to evaluate whether in MPM there is an association between SUV, histotype, TILs score and subtypes, and clinical outcomes.

Methods:
A retrospective analysis of 119 patients affected by MPM, diagnosed in Policlinico of Milan between 2010 and 2016, was conducted. The population was homogeneous for age, sex, staging; epitelioid histotype was predominant. The specimens were analized by two different pathologists in order to assess TILs by immunochemistry, both intratumoral and peritumoral. Cox regression was made: SUV, histology, Ki67, TILs score (intratumoral and peritumoral), mitosis, CD (cluster of differentiation) were related to survival.

Results:
SUV and sarcomatoid subtype are related to longer survival. A high total TILs score relates to better prognosis, without statistical significance (p=0.084). However, univariate analysis of peritumoral TILs demonstrated an association (p=0.02) with longer survival: significance and survival are higher in epitelioid subtype; no relation was found in sarcomatoid one. The χ^2 test didn't show relations between SUV and TILs.

Conclusions:
Despite the limits of a monocentric retrospective study, this analysis demonstrated a relation between MPM TILs and survival, especially in epitelioid subtype. Further investigations about TILs as markers of prognosis or immunotherapic targets have to be pursued.

Disclosure: No significant relationships.
Keywords: lymphocytes, PET, TILs, mesothelioma, pleura