F-027
RISK GROUP ANALYSIS FOR PROLONGED AIR LEAK FOLLOWING SURGERY FOR PRIMARY SPONTANEOUS PNEUMOTHORAX: IS PREOPERATIVE USE OF CANNABIS A PREDISPOSING FACTOR?
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Objectives: Prolonged air leak (PAL) remains a risk factor for morbidity following any thoracic procedure. This complication is particularly ‘annoying’ in modern practice even after short procedures such as bullectomy and talc pleurodesis for primary spontaneous pneumothorax (PSP). We dissected our recent results and noticed a significant number of cannabis smokers treated for PSP who experienced postoperative prolonged air leak despite meticulous surgery. We therefore compared this group with a control and performed a literature search.

Methods: We performed a retrospective analysis of 72 consecutive patients treated for PSP in our department in the last 23 months. Within this group we identified and compared the current or previous cannabis smokers (CG) with a control group (NCG). All received a standard bullectomy and talc pleurodesis. A single chest drain was placed on suction and was removed after 48-72 hours if there was no clinically significant air-flow and lung was expanded on a chest X-ray. Patients with prolonged air leak (>120 h) were connected to a Heimlich valve and discharged.

Results: Thirteen patients experienced a PAL (18.1%). The majority were cannabis-smokers (n = 10). Additionally, PAL was evident in 43.5% and 6.2% between the CG and NCG group. Due to the relatively small number of patients and nature of data the Fisher’s exact test was used for analysis. Prolonged air-leak and cannabis use were dependent variables (P < 0.01).

Conclusions: The use of cannabis evidently relates to spontaneous pneumothorax but it is unclear if it directly contributes to the development of bullous disease. It seems that cannabis smoking predisposes patients to prolonged air leak following surgery for PSP despite meticulous surgery and postoperative care. The study does not attempt to stigmatise patients by social habits but alerts physicians and patients of potential complications with an impact to community services and increase in treatment costs.

Disclosure: All authors have declared no conflicts of interest.