AB163. Evaluation of seasonal appendicitis: single Irish center experience

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Background: Acute appendicitis is a common clinical condition worldwide. Its incidence varies between countries, and a few studies reported seasonal variations of acute appendicitis, however, with variable results and conflicting data. There is very sparse data available regarding seasonal variation of acute appendicitis in the Republic of Ireland. This study aims to evaluate the seasonal variation of acute appendicitis in our institution.

Methods: This is a retrospective cohort study including all appendicectomies for acute appendicitis over 5 years starting 2012. We included 2,341 patients of which 1,848 had histologically confirmed acute appendicitis (oedematous, suppurative and gangrenous). We also took into account the presence of parasitic organisms and of perforation in the histological specimen.

Results: The difference in appendicitis seasonal incidence is not statistically significant (P=0.22) for either male or female patients (P=0.65; P=0.34). There is no significant statistical connection between the type of appendicitis and the season (P=0.055). Having a P value so close to 0.05, it is important to note that the 2 variables associate strongly but this link is not statistically significant. Neither the presence of parasites (P=0.08) or perforation (P=0.11) are significantly linked to the season in which the appendectomy was performed.

Conclusions: There is no significant seasonal incidence variation for acute appendicitis in our institution over a period of 5 years, however further studies on a more controlled cohort of patients are necessary to address the hypothesis.

Keywords: Seasonal appendicitis; appendicitis; seasonal variation; retrospective cohort study; single irish centre

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