

## ABSTRACT

### THE CORRELATION BETWEEN PASSIVE RETRAGRADE FILLING AND INFLAMMATION OF THE APPENDICES

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In spite of the indefinite function of vermiform appendix, the incidence of disadvantageous inflammation in this organ is quiet high. The common clinical symptom and sign of appendicitis is the lower right abdominal Mac Burney pain, usually used as the critical indication for surgical intervention. The histopathological findings, is still considered as the golden diagnostic standard for appendicitis. The passive retrograde filling of barium meal examination in patients with appendicitis, is stated as the pathological phenomena.

The aims of this study were assessing any inflammatory cytokines level difference and any correlation between PRF - Non PRF groups, FM - Non FM groups, PRF - FM groups, PRF and FM group with inflammatory group.

The study was conducted through observational method, e.g. case control study. The population and samples consist of case group of patients with clinically appendicitis and control group of patients without complaint of right lower quadrant pain matching against the case group.

The study was in conformed with the issued ethical clearance and in accordance with Medical Code of ethics.

Analytical tests used in the study were homogeneous test and data normality test. Independent t test, Chi Square test, and canonical correlation were used for hypothetic test.

The study results showed: (1) significant difference between PRF and Non PRF group on TNF- $\alpha$ , IL-6, IFN- $\gamma$ , CRP and C3 ( $p < 0.05$ ), (2) significant difference between FM and Non FM group on IFN- $\gamma$  and IL-6 ( $p < 0.05$ ), (3) strong correlation between PRF and FM in the appendices lumen ( $p < 0.05$ ), (4) strong correlation between PRF and FM as a group with inflammation as a group ( $p < 0.05$ ), (5) significant correlation between PRF and high IFN- $\gamma$  ( $p < 0.05$ ), and inferred conclusion of (6) histopathologically there was correlation between PRF and chronic appendicitis.

*key words: appendicitis, inflammatory cytokines level, passive retrograde filling, IFN- $\gamma$*

*Abbrev: PRF = Passive Retrograde Filling*

*FM = Fecal Material in the appendices lumen*