diagnosed clinically as having acute appendicitis were recruited. 60% were males, mean age 28±6 years. Patients with previous medical, surgical or gynecological complaints, severe debilitating diseases like hypertension, diabetes, obesity, blood dyscrasias, anemia or previous surgeries were excluded from the study. All the patients later underwent either elective or emergency appendicectomy and the preoperative leukocyte count was compared with histopathology findings of resected appendix.

**Results:** Total leukocyte count (TLC) was calculated in each case individually and was compared with the histopathological report from the laboratory accordingly. The sensitivity and specificity of WBC count was calculated by standard formula and was found to be 82.4% and 78.7% respectively. The positive predictive value of WBC count (raised TLC) in diagnosing acute appendicitis was 93.8% showing that raised TLC along with clinical history is really a diagnostic marker for this condition.

**Conclusion:** Clinical history and physical examination are the key factors in diagnosing acute appendicitis as radiological findings are not much helpful. Although WBC count and raised TLC is not a standard criteria for diagnosing acute appendicitis, but still it is one of the strong predictor of this acute condition in emergency room and should strongly be considered while making the diagnosis of acute appendicitis.

**PP-059 Detection of infectious and genetic diseases in specimens from children using a polymerase chain reaction – laboratory experience in pediatrics**

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**Background:** Polymerase chain reaction (PCR) has rapidly become one of the most widely used techniques in molecular biology. PCR allows isolation of DNA fragments from genomic DNA by selective amplification of a specific region of DNA.