ABSTRACT

INTRODUCTION

Acute appendicitis is the commonest cause of acute surgical abdomen. Acute appendicitis and its complications continue to be a significant source of morbidity and mortality, so prompt recognition and proper treatment is essential. Appendix usually referred as a vestigial organ with no known function is now considered as a specialised part of gastro intestinal tract with concentration of lymphoid tissue. It is an integral part of gut associated lymphoid tissue (GALT). Appendix is useful in reconstructive biliary, tubal and urological surgery. Negative appendicectomy therefore robs the patient of a useful asset and also has a morbidity of 15%.

AIM OF THE STUDY

To analyze the incidence of acute appendicitis in relation to the total number of surgical emergencies . To correlate between Modified Alvarado Scoring System (MASS) and ultrasonogram findings in the diagnosis of acute appendicitis

MATERIALS AND METHODS

This is a prospective descriptive study among patients operated for acute appendicitis in Thanjavur Medical College Hospital during the period of September 2016 to August 2017. About 380 patients who were operated for acute appendicitis on emergency basis were analyzed. Patient's history and clinical examination was done to arrive at a

diagnosis and Modified Alvarado Score was calculated for all patients. USG was done in 308 patients

INCLUSION CRITERIA

- Persons more than twelve years of age who were operated for acute appendicitis

EXCLUSION CRITERIA

- Persons less than twelve years of age
- Patients who were managed conservatively
- Patients with appendicular mass

OBSERVATIONS AND RESULTS

1) Appendicectomies are the most common emergency surgery done accounting for 25.54% of the total emergencies
2) The most common age group affected is 21-30 yrs which accounts for 47.9% of patients
3) Males have a slightly increased incidence (53.7%) of acute appendicitis when compared to females
4) The most common variable among the Modified Alvarado Score is Migratory RIF pain which is present in 97.9% of patients

5) The MASS score is more than or equal to 7 in about 81.1% of patients and has sensitivity of 81.8% and positive predictive value of 99.4%
6) The overall negative appendicectomy rate is 1.6 %
7) USG is more sensitive (94.7%) than MASS in the diagnosis of Acute Appendicitis but it lacks specificity
8) Fecolith is present in 40.25% of patients who were undergone USG and it has a PPV of 100% and is mostly associated with acute perforated appendicitis or appendicular abscess

CONCLUSION

Our study demonstrates that modified Alvarado score applied to all adult patients is substantially superior in the diagnosis of acute appendicitis with a sensitivity of 81.8 % and a specificity of 66.6 %.

The Alvarado score is both simple to remember and to use. Scoring system seems ideal for the diagnosis of acute appendicitis because it's noninvasive , requires no special equipment and **can be easily used by A JUNIUR RESIDENT in clinical routine in a peripheral hospital.**

Negative appendicectomy rate in this study is 1.6 % . Whereas in general the negative appendicectomy rate reported in literature is 15 -30 % . Thus it grossly reduces the negative appendicectomy rates.

In comparision the abdominal ultrasound has shown results, with an average sensitivity of 94.7% and a specificity of 50% in the hands of experienced Person.

According to our study, USG seems to be a more sensitive investigation but it lacks specificity. USG is more useful in deciding for surgery in patients with Modified Alvarado Score < 7. Hence Modified Alvarado Score along with Ultrasonogram proves to be evident in the diagnosis of acute appendicitis thereby reducing the rates of negative appendicectomy as well as missed appendicitis both of which are equally harmful to the society.

KEY WORDS

Appendicitis, Alvarado scoring, ultrasonogram, appendiculolith, RIF pain, rebound tenderness, appendicectomy, appendicular mass, perforated appendicitis, interval appendicectomy