

# ORIGINAL RESEARCH PAPER

**General Surgery** 

# ACTINOMYCOSIS AND APPENDICITIS: A QUAINT PRESENTATION

**KEY WORDS:** Actinomycosis, Appendicitis

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BSTRACT

The appendix is a mid-gut organ identified during 8th week of gestation as an out pouching in the caecum. The concept of it being considered as a vestigial organ is in decreasing trends owing to the presence of lymphoid tissue in its submucosa. The diagnosis of acute appendicitis remains a clinical paradigm and warrants an urgent and emergent surgery in the emergency department. The most important causative factor is luminal obstruction secondary to long standing inflammation caused by E.coli, K.pneumoniae, Streptococcus ,Enterococcus and the rare ones being actinomycosis, ascariasis and carcinoid.

#### INTRODUCTION

Acute appendicitis remains one of the most commonly encountered surgical emergencies. Luminal obstruction secondary to inflammation is the most commonly attributed cause for acute appendicitis followed by lymphoid hyperplasia, fecoliths and fecal stasis. Other unusual causes that contribute to appendicitis are carcinoid, granulomas, actinomycosis and ascariasis. Incidence of actinomycetes is 0.02-0.06%.

## **CASE REPORT**

A 25 year old male presented with complaints of abdominal pain for three days, more in the right lower quadrant ,continuous with no aggravating /relieving factors. H/o vomiting > 3 episodes for the past two days,non-bilious non blood stained containing food particles. No h/o fever, No h/o loose stools.

On examination abdomen was soft, no scar/sinus, tenderness over the right ileac fossa and Umbilical region, no mass/ distension. Patient was taken up for emergency Open appendectomy the same day after confirming with USG abdomen and pelvis. Intra operatively appendix was found to be inflamed and retrocaecal in position measuring 1.5cm in diameter.

Specimen sent for histopathological examination and was found to have features suggestive of chronic appendicitis with Actinomycosis. Patient was then treated postoperatively with tablet doxycycline 100mg per oral for 6 months. Patient was followed up after 6 months and was asymptomatic of the disease.

### Intraoperative And Histopathological Photos



Fig1:Intraoperative Appendix Specimen

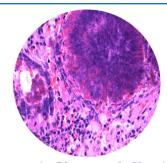


Fig2: Microscopic Photograph Showing Sulphur Granules

# DISCUSSION

Reginald Fitz in 1886 described the pathologic basis of the acute appendicitis; Stevenson in 1999 introduced the term chronic appendicitis. "It is either due to transient obstruction of appendix or excessive mucus production that results in recurrent appendicitis whilst partial or complete obstruction of lumen of appendix results in chronic appendicitis."

ACTINOMYCOSIS remains a rare cause for appendicitis. Actinomycosis Israeli being the most common organism responsible for the disease.  $^{^2}$ 

Difficult to be diagnosed preoperatively patient would need iv Penicillin treatment for 2 -8 weeks in uncomplicated actinomycosis, alternatives are oral Amoxicillin, Tetracyclines. Antibiotics are started owing to its complication of Enterocutaneous Fistula formation.

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