A Study of Incidence of Various Etiology for Appendicitis in Emergency Appendicectomy by Laparoscopic Method

Authors
Dr Ravichandran K¹, Dr K.C.M. Rajkumar²
¹,²Dept of Surgery Rajah Muthiah Medical College, Annamalai University, Annamalainagar, Chidambaram, Tamil Nadu

Abstract
Background: Appendicitis is one of the most common cause of acute abdomen. laparoscopic appendicectomy performed as emergency procedure in many centres as changing trends.
Aims: To study the various outcome of findings in cases with acute appendicitis performed within 24 hours by laparoscopic methods.
Patients and Methods: This is a retrospective hospital based study.50- symptomatic patients diagnosed as acute appendicitis and findings were observed by laparoscopic appendicectomy.
Results: laparoscopic appendicectomy done as emergency procedure (within 24 hours) revealed different pathological findings 46(92%)out of 50 patients,presented with acute appendicitis.
Conclusion: laparoscopic appendicectomy as an emergency procedure revealed appendicular pathology responsible for symptoms.
Keywords: Faecolith,Appendicular mass,Worms,Carcinoma Caecum.

Introduction
Appendix is considered by the most to be vestigial organ, its importance in surgery results only in its propensity for inflammation which results in clinical syndrome known as acute appendicitis. it is a blind muscular tube with mucosal, submucosal, muscular and serosal layers. Decreased dietary fibres and increased consumption of refined carbohydrates may be important, while appendix is clearly associated with bacterial proliferation within appendix.no single organism is responsible, mixed growth of aerobic and anaerobic organisms are usual.
Obstruction of appendicular lumen has been widely held to be important and some form of luminal obstruction either by faecolith or stricture is found in majority of cases. A faecolith is composed of inspissated faecal material, calcium phosphates, bacteria, debris, rarely a foreign body incorporated in to the mass. Obstruction of appendicular orifice by tumor particularly caeca or a duct is an occasional case of middle age and elderly patients. Intestinal parasites particularly oxyuria vermilaris (pin worm) can proliferate in appendix and occlude the lumen. Obstruction of appendicular lumen seems to be essential for the development of appendicular gangrene and perforation. Lymphoid hyperplasia leads to narrowing lumen of appendix leading to obstruction.
Review of literature
Emergency Appendicectomy done by laproscopic methods were done in one study and the findings were detected in 100 patients. In another study 72% of 100 patients had pathologies in appendix detected by laproscopic method while performing emergency appendicectomy.

Another study, laparoscopic methods performed as an emergency procedure and the findings were faecolith 12(24%), appendicular perforation 4(8%), appendicular mass 4(8%), and impending gangrene 5(10%).

A study conducted between 2012 -2014 ,where 150 patients enrolled and findings of lap appendicectomy done as emergency procedure were faecolith 24(48%), appendicular mass12 (24%), Ca.caecum 4(8%), fibrotic stricture 10(20%), and appendicular abscess 12(24%) and intestinal worms 14(28%).

Objectives
1. To study the various outcome of findings in patients with acute appendicitis undergoing lap appendicectomy.

Patients and Methods
This study was a retrospective study conducted during the period of 2014 -2016 .50 patients were included, the data have been collected from Medical Records Department at Rajah Muthiah Medical College.

Results:
50 patients were included in the study.the findings were 4(8%) had normal appendix,46(92%) had different pathologies in appendix.

<table>
<thead>
<tr>
<th>Serial no:</th>
<th>Lap.findings</th>
<th>No.of subjects</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Faecolith</td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td>2</td>
<td>Appendicular mass</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>3</td>
<td>Intestinal worms</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>Perforation</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>Gangrene</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>6</td>
<td>Foreign body</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>7</td>
<td>Ca.caecum</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

Discussion
In this study, lap appendicectomy was done as an emergency procedure (within 24 hours) and the findings were faecolith present in 14 patients, appendicular mass present in 6 patients, worms in 6 patients. Perforation, Gangrene, Foreign Body in 5 patients respectively. Ca.caecum in 1 patient.

References


