



ORIGINAL RESEARCH PAPER

Surgery

WAITING TIME FOR EMERGENCY APPENDECTOMY : ARE WE EXCEPTIONAL?

KEY WORDS:

Dr Tagalsir Alamin logman

MBBS,MRCSI,MRCS,FEBS,FMAS,DMAS Specialist general surgeon Royal hospital.

Background:

Acute appendicitis is the most common surgical emergency. Delay in operating on patients with acute appendicitis and it's morbidity is well studied and it is a known cause of patient dissatisfaction.

Increase in emergency surgical patients is a natural consequence of increased population size.

This applies to all surgical specialties where as the size of our facility at royal hospital remains the same.

In recent years there has been an increase in number of patient signing LAMA due to delay in procedure.

Despite the controversy in the literature regarding the actual time period after which the appendix perforation and SSI rate goes high, there is a consensus on early safe operation is the best if possible rather than delay.

AIM OF THE STUDY:

To see our performance at Royal Hospital in terms of emergency surgical patients' management taking acute appendicitis as an example and compare it to other hospitals.

OBJECTIVES:

- To identify the mean waiting time for appendectomy.
- To follow the pathway of patient flow from ED to OR of patients with acute appendicitis and identify areas of improvement.
- To compare the time taken to manage acute appendicitis at the Royal hospital with other hospitals by reviewing the literature.

METHODS :

Patients who had laparoscopic or open appendicectomy in the Royal hospital from January 2019 to December 2021 were included in the study.

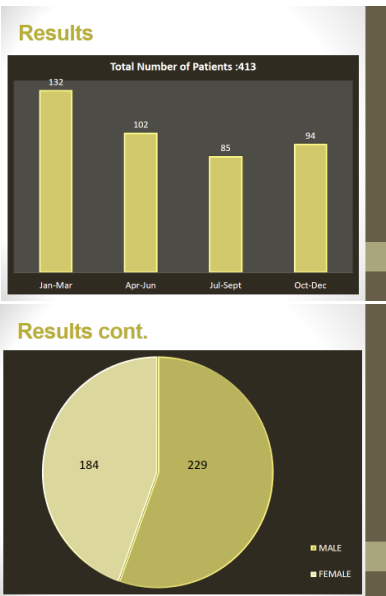
Elective appendicectomy patients were excluded from the study.

Data collected retrospectively from the electronic medical records for the following time periods:

- Time from registration in the ER to time referred to surgery.
- Time from referral to surgery to time surgeons entered notes with decision.
- Time taken from the surgical response to the time of admission
- Time from admission to the time of operation

The data were further divided into 3 months blocks to identify any trend in the mean time taken in each step of the patient flow.

The collected data were analysed using window's excel program and the mean time was calculated for the above mentioned time periods.



RESULTS:

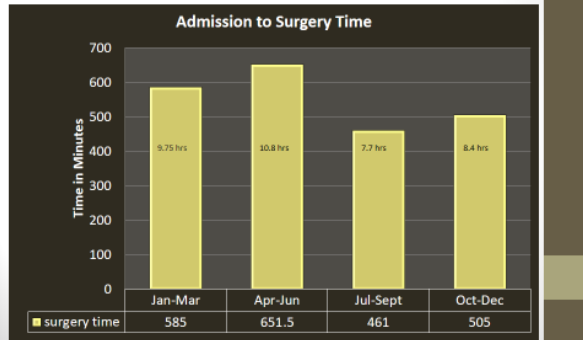
There was no significant difference between mean waiting time after admission until surgery between males and females 8.7 hrs versus 9 hrs respectively (only 20 minutes difference).

However if we take the total waiting time between registration and surgery there was a mean of 2.5 hrs difference (male 11.6 hrs versus females 14 hrs).



- Mean time taken to refer to surgeon remained pretty much the same upto **2 hrs**
- Mean time taken by surgeons' to reply was 50 and came down to **40 mins**
- Unfortunately mean time taken to admit a patient after a decision taken has increased from roughly **1 hr to 1.5 hrs**

Mean waiting time for surgery came down from 10 hrs in the first half of the year to about 7 to 8 hrs in the second half which is a significant drop



DISCUSSION:

- Possible factors contributed in the improvement of time from admission till surgery:
- Start of morning emergency OR 3 times/week
- Afternoon emergency OR for urology and paediatric surgery.
- Increase number of staff.
- Delay in admission could be due to lack of beds.

CONCLUSION:

- Our waiting time for emergency appendectomy is better than many other centers quoted in the literature
- There is a definite trend towards reduction of mean waiting time. And if the reasons mentioned are correct then we expect further improvement with the availability of round the clock emergency OR.

Limitations of the study:

- The retrospective nature of the study does not allow definitive conclusions, which can be obtained in a prospective fashion only.
- Accuracy of data collected from electronic records is prone to some bias.

REFERENCES:

1. **Delay To Surgery In Acute Appendicitis: Contributing Factors And Associated Morbidity**
2. *JWilson, R Skourat, L Lai, E Babu, C Kelley*
3. **Citation**
4. J Wilson, R Skourat, L Lai, E Babu, C Kelley. *Delay To Surgery In Acute Appendicitis: Contributing Factors And Associated Morbidity*. The Internet Journal of Surgery. 2006 Volume 13 Number 1
5. Discussion and Conclusion: Patients who waited longer for surgery had a significantly higher post-operative complication rate, greater use of antibiotics, and longer stay in hospital. The use of pre-operative imaging (more common in females) and local CEPOD policies were significant contributing factors to these delays.
6. **Hospital tests and patient related factors influencing**
7. **time-to-theatre in 1000 cases of suspected appendicitis: a cohort study**
8. Suzanne Beecher, Donal Peter O'Leary and Ray McLaughlin