



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1464970>Available online at: <http://www.iajps.com>

Research Article

**PROS AND CONS OF LAPROSCOPIC APPENDISECTOMY
WITH SUPRAPUBIC CAM PORT**¹Dr.Ali Assad, ²Dr Ambreen Amna, ³Dr. Aleem Hamza Bajwa¹Incharge Health Officer, Basic Health Unit 86/eb Arifwala, Pakpattan.²WMO (IRMNCH), RHC Gaggoo, Burewala, Vehari³Incharge Health Officer, Basic Health Unit Badli Sharif**Abstract:**

Objective: To assess the outcomes of the surgical removal of appendix through Laparoscopy with the use of midline upper pubic camera port.

Methodology: The research was carried out from January 2017 to April 2018. All the patients who underwent surgical removal of appendix by Laparoscopy during the duration of this research work included in this research work. Surgery duration, difficulties, conversion and stay in the hospital were evaluated.

Results: Thirty-four patients were the participants of this research work. There were twenty-one male participants and thirteen females. The participants' average age was 25.12 years. The average surgery duration was 54.39 minutes. Three sufferers were needed conversion to open surgical removal of the appendix. Two sufferers got infections in the wounds. The average stay of the patients in the hospital was 1.29 days.

Conclusion: The surgical removal of the appendix by Laparoscopy with the help of upper pubic camera port is authentic and safe procedure.

Keywords: Appendix, Laproscopic, surgical removal, camera port, conversion, Laparoscopic Appendicectomy (LA), Suprapubic.

Corresponding author:**Dr.Ali Assad,**

Incharge Health Officer,
Basic Health Unit 86/eb Arifwala,
Pakpattan.

QR code



Please cite this article in press Ali Assad et al., *PROS and CONS of Laproscopic Appendisectomy with Suprapubic Cam Port.*, Indo Am. J. P. Sci, 2018; 05(10).

INTRODUCTION:

Surgical removal of the vermiform appendix (Appendicectomy) is very common operation method. Charles McBurney gave the analysis on early surgical involvement in serious swollen and painful appendix to the surgical society of New York in 1889. He made the procedure after five years and gave it the name of McBurney's incision [1, 2]. A German, Kurt Semm carried out first LA (laparoscopic Appendicectomy) in 1983 [3]. But at this modern age, LA is still not able to get the attraction and name as gained by laparoscopic cholecystectomy.

In the start, different type of practices cannot get success for laparoscopy, large operation duration, equal stay in the hospital, less improvement in the wound improvement and recovery duration. But the recent research works shows an inclination towards due to high occurrence rate of this method in every stage of the operation training. They conclude the proof for the decrease in the surgery time, very fast duration of recovery and low occurrence of the difficulties in wound recovery with the opposition in the danger of increasing ileus which is errand of laparoscopy [4].

Various methods have been prescribed by various authors for laparoscopic Appendicectomy regarding the placement of the camera port, multiple methods are annotated by different researchers for LA in respect to port placement, controlling the base of the appendix, the separation of the meso-appendix and confiscation of the appendix [5-12]. Periumblical or suprapubic site

usage is the choice for the placement of port [6, 7, 13]. Cholecystectomy is the most frequent used laparoscopic-surgery by surgeons. This method has a benefit that three operational ports are placed 1 quadrant down but the setup of this method is not changed only the ports position is changed. This is based upon the very first report of our practice with this method of laparoscopic Appendicectomy.

METHODOLOGY:

All the patients who underwent LA from January 2017 to April 2018. The Participants were laid down with their face upward on the surgical table and the subjects were asked to lay flat on the operating table and general loss of sensation drug was used for all the participants. Urinary catheter was used for the decompression of the bladder, which was also separated at the end of the operation. The specialist and the assistant with camera were standing on the left side of the patient, facing towards the monitor which was placed at the right side of the patient on a table.

Open Hasson method was used for the establishment of Pneumoperitoneum with a ten millimetre infraumbilical cutting of body tissues or organs for operation. Ten millimetres Laparoscope was entered into the belly and discovery through laparoscopy was carried out. After that, following the leadership of video another ten millimetres port was entered two centimetres in the midline above pubic symphysis. Right iliac fossa was introduced by a five millimetres port as described and shown in Figure-1.

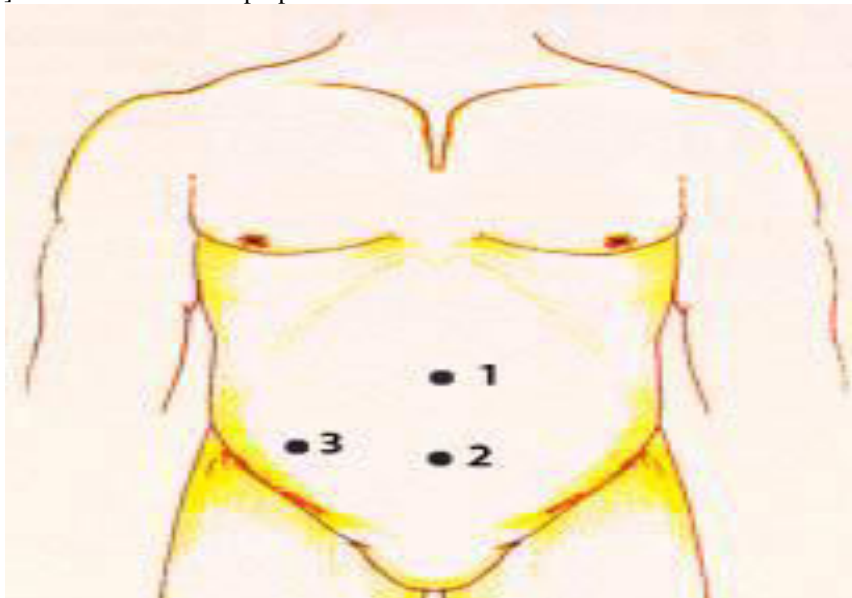


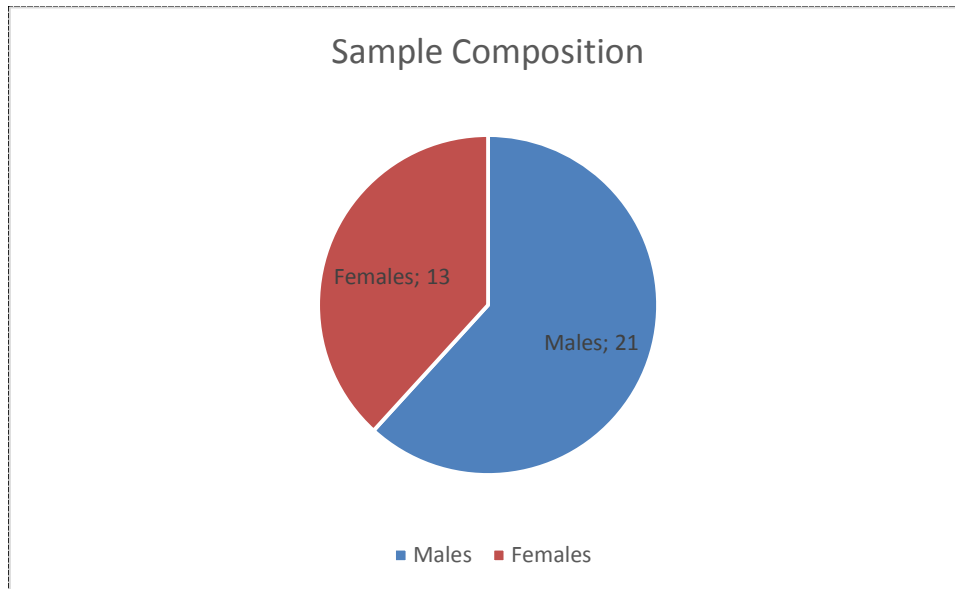
Figure 1: Port Placement

1. 10mm Right hand working port
2. 10 mm Camera port
3. 5 mm Left hand working port

These ports were also used for right and left hand apparatus. Withdrawal and analysis was carried out by the method using both hands. Thick appendixes were removed with the use of endobags and reducer sleeve was used for the removal of small and thin appendixes.

RESULTS:

During the duration of this research 34 patients have to face LA with above mentioned technique. Twenty-one were the male participants and thirteen were female participants.



The average age of the patients was 25.12 years. The range of the age was fifteen years to fifty-three years. The average surgery duration for all the participants was 54.39 minutes and its range was twenty-five minutes to one hundred and twenty minutes. Three sufferers were excluded because of their method was converted into open method so after their exclusion the average surgery time was 49.19 minutes. All those three patients were in critical condition and cannot be handled with the above mentioned method. Wound infection was developed in two patients who were tackled with taking safety measures against those infections. The participants who were discharged from the hospital on the very first day were 26 and they were about seventy-five percent of the total count. Six patients got discharge after forty-eight hours and two patients got discharge after three days from the hospital. The average stay in the hospital was about 1.29 days.

DISCUSSION:

The reputation of laparoscopic appendicectomy has been increased since the day of its idea but at this time, it is not able to touch the status of golden standard. The benefits of the laparoscopic appendicectomy are less duration, painless recovery from wound, less difficulties and good evaluation of the intra belly diseases which can be harmful in the future [14]. Various methods have been concluded by different scholars to perform laparoscopic appendicectomy [5-12].

Telescope placement is carried out with the help of periumbilical or suprapubic port. The position for the functioning ports changes from top right corner to the point of Mc Burney, iliac fossa on the left side and below midline [15-17]. Midline upper cubic port is used as the port of camera. Periumbilical port works as right port and iliac fossa ports on the right side works as left functioning port. Caceum lower surface is visualized by the

good position of the port and the base of the appendix.

In this method, three essential ports are moved down one quadrant and it is concluded as greater by other scholars working in the same field [6]. The surgery time for the laparoscopic appendicectomy is concluded longer than the open surgical removal of the appendix but the operative time can be decrease with the increase of experience [18].

The concluded surgery duration deviates from eighteen minutes concluded by Hussain [19] to one hour and fifty minutes [20]. The concluded average operation time of this study 54.39 minutes is close many other authentic studies. Mustafa Kamal concluded the average surgery time of fifty-five minutes. He belongs to Multan [21]. The conversion of the LA to open surgery was needed in the cases of three patients. Appendix with the gangrenous base was found in two patients and the physical condition of the appendix was not clear in

the last patient.

Research scholars have concluded the surgery conversion rate from 0.55% to about twenty-two percent [22, 23]. Ng from Hong Kong has examined the surgery conversion by using same method as about nine percent in seven hundred and seventy-five patients [5]. This surgery conversion causes to increase the surgery time and duration in the hospital and mean surgery time for the patients of converted surgery was ninety minutes but the exclusion of only three patients has made the mean time 49.19 minutes. The most important reason to convert the surgery was complicated situation of the swollen and painful appendix [24].

The average hospital duration was 1.29 days in both local and foreign studies [18, 25]. Bennett concluded the less stay of the patients for LA in the hospital in comparison to the open surgical removal of the appendix [4]. Gilliam has proved laparoscopic appendectomy is attractive and safe method [26]. In this research work, two participants got infection in the wounds which is also similar with the outcomes of some other works [26, 27]. This infection of wounds is less as compared to the open surgery [4, 29]. The use of the reducer sleeves and endobag prevent any link between wound and the removed appendix [21, 28, 30].

CONCLUSION:

The numbers of participants in this research work are small. But the outcomes of this research work can be compared with the results of other studies carried out in the same field. We can conclude that LA with upper pubic port of camera is very safe option.

REFERENCES:

- McBurney C. Experience with early operative interference in cases of disease of the vermiform appendix. *New York Med J* 1889;1:676-84.
- McBurney C. The incision made in the abdominal wall in cases of appendicitis, with a description of a new method of operating. *Ann. Surg* 1894;20:38
- Semm K. Endoscopic appendectomy. *Endoscopy* 1983;15:59-64.
- Bennett J, Boddy A, Rhodes M. Choice of approach for Appendectomy: A Meta-analysis of open versus Laparoscopic Appendectomy. *Surg Laparosc Endosc Percutan Tech* 2007;17:245-55
- Ng WT, Lee YK, Hui SK, Sze YS, Chan J, Zeng AGY, et al. An Optimal, Cost-effective Laparoscopic Appendectomy Technique for Our Surgical Residents. *Surg Laparosc Endosc Percutan Tech* 2004;14:125-9.
- Ng WT. Port placement for laparoscopic appendectomy with the best cosmesis and ergonomics. *Surg Endosc* 2003;17:166-7.
- Motson RW, Kelly MD. Simplified technique for laparoscopic appendectomy. *ANZ J Surg* 2002;72:294-5.
- Shalaby R, Arnos A, Desoky A, Samaha AH. Laparoscopic Appendectomy in Children: Evaluation of Different Techniques. *Surg Laparosc Endosc Percutan Tech* 2001;11:22-7.
- D'Souza FR, Anwar MA, Audisio RA, Memon MA. A simple and inexpensive method for laparoscopic appendectomy. *Surg Technol Int* 2007;16:93-6.
- Aslan A, Karaveli C, Elpek O. Laparoscopic appendectomy without clip or ligature. An experimental study. *Surg Endosc* 2007;2084-7.
- Saad M. Fisherman's technique, introducing a novel method for using the umbilical port for removal of appendix during laparoscopic appendectomy. *Surg Laparosc Endosc Percutan Tech* 2007;17(5):422-4.
- Hanssen A, Plotnikov S, Dubois R. Laparoscopic appendectomy using a polymeric clip to close the appendicular stump. *J Society Laparoscopic Surg* 2007;11(1):59-62.
- Pedersen AG, Petersen OB, Wara P. Randomized clinical trial of laparoscopic versus open appendectomy. *Br J Surg* 2001;88:200-5.
- Sweeny KJ, Keane FBV. Moving from open to laparoscopic appendectomy. *Br J Surg* 2003;90:257-8
- Josloff RK, Zucker KA. Laparoscopic appendectomy. In: Zucker KA, ed. *Surgical laparoscopy*. Philadelphia: Lippincott Williams & Wilkins 2001;229-36.
- Ferguson CM. Acute appendicitis. In: Morris PJ, Wood WC, eds. *Oxford Textbook of Surgery*. New York, Oxford University Press. 2000;1539-43.
- Soybel DI. Appendix. In: Norton JA, Ballinger RR, Chang AE. eds. *Surgery: basic science and clinical evidence*. New York, Springer-Verlag 2001;647-67.
- Ali A, Moser MA. Recent experience with laparoscopic appendectomy in a Canadian teaching centre. *Can J Surg* 2008;51(1):51-5.
- Hussain A, Mahmood H, Singhal T, Balakrishnan S, El-Hasani S. Laparoscopic appendectomy in a district hospital: does the technique influence the outcome? *J Laparoendosc Adv Surg Tech A* 2008;18(2):204-8.
- Long KH, Bannon MP, Zietlow SP. A prospective randomized comparison of laparoscopic appendectomy with open appendectomy: Clinical and economic analyses. *Surgery* 2001;129:390-400.
- Kamal M, Qureshi KH. Laparoscopic versus open appendectomy. *Pak J Med Res*

- 2003;42:23-6
22. Konstantinidis KM, Anastasakou KA, Vorias MN, Sambalis GH, Georgiou MK, Xiarchos AG. A decade of laparoscopic appendectomy: Presentation of 1026 patients with suspected appendicitis treated in a single surgical department. *J Laparoendosc Adv Surg Tech A* 2008;18(2):248-58.
23. Paterson HM, Qadan M, DeLuca SM, Nixon SJ, Paterson-Brown S. Changing trends in surgery for acute appendicitis. *Br J Surg* 2008;95:363-8.
24. Hellberg A, Rudberg C, Enochsson L, Gudbjartson T, Wenner J, Kullman E, et al. Conversion from laparoscopic to open appendectomy: a possible drawback of the laparoscopic technique? *Eur J Surg* 2001;167(3):209-13.
25. Parveen S, Sarwar G, Saeed N, Channa GA. Laparoscopic versus open appendectomy as an elective procedure. *Med Channel* 2007;13(1):18-20.
26. Gilliam AD, Anand R, Horgan LF, Attwood SE. Day case emergency laparoscopic appendectomy. *Surg Endosc* 2008;22(2):483-6.
27. Tanaka S, Kubota D, Lee SH, Oba K, Matsuyama M. Effectiveness of laparoscopic approach for acute appendicitis. *Osaka City Med J* 2007;53(1):1-8.
28. Caravaggio C, Hauters P, Malvaux P, Landenne J, Janssen P. Is laparoscopic appendectomy an effective procedure? *Acta Chir Belg* 2007;107(4):368-72.
29. Pokala N, Sadhasivam S, Kiran RP, Parithivel V. Complicated appendicitis—is the laparoscopic approach appropriate? A comparative study with the open approach: outcome in a community hospital setting. *Am Surg* 2007;73(8):737-41.
30. Khan MN, Fayyad T, Cecil TD, Moran BJ. Laparoscopic versus open appendectomy: the risk of postoperative infectious complications. *J Society Laparoscopic Surg* 2007;11(3):363-7.