WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.084
Volume 13, Issue 2, 848-853. Case Study ISSN 2277–7105

ROLE OF DIAGNOSTIC LAPAROSCOPY IN MANAGEMENT OF CHRONIC ABDOMINAL PAIN.- A CASE STUDY

Shubham K. Mengade[1]* and Nandkishor V. Borse[2]

[1]PG Scholar, Dept. of Shalayatantra, TAMV, Pune.

[2]Prof. & HOD, Dept. of Shalyatantra, TAMV, Pune.

Article Received on
29 November 2023,

Revised on 19 Dec. 2023,
Accepted on 09 Jan. 2024

DOI: 10.20959/wjpr20242-31020

***Corresponding Author**
Dr. Shubham K. Mengade
PG Scholar, Dept. of Shalayatantra, TAMV, Pune.

INTRODUCTION

Diagnostic laparoscopy (DL) is minimally invasive surgical procedure that allows an endoscopic examination of the peritoneal cavity which facilitates visualization of more than two thirds of the liver surface, gallbladder, spleen, falciform ligament, parietal peritoneal surface, serosal aspects of the gastrointestinal (GI) tract and the pelvic organs directly. The abdominal organs can be viewed directly with video images and documentation achieved. Diagnostic laparoscopy provides an intermediate option avoiding full exploratory laparotomy and minimizing the surgical trauma in chronically ill patients. The video image of the liver, stomach, intestines, gallbladder, spleen, peritoneum, and pelvic organs can be viewed on a monitor after insertion of a telescope into the abdomen. Manipulation and biopsy of the viscera is possible through additional ports.

AIM

To highlight the importance of diagnostic laparoscopy in management of chronic abdominal pain with inconclusive investigations.

OBJECTIVE

To study the basic fundamentals of diagnostic laparoscopy and evaluate the role of DL in patient with chronic abdominal pain where final diagnosis could not achieved after all necessary investigations.

CASE REPORT

A 61 yrs old female patient having c/o Pain in abdomen (Epigastric region) since 3 months Abdominal fullness since 3 months, Altered bowel habits, Dyspneoa on exertion since 25 days, Weight loss approx. 5 kg since 2 months.

On examination- Abdominal distenstion +++Soft, mild tenderness noted On percussion - Shifting dullness present Fluid thrills present Horseshoe shape dullness present. Patient is having H/O diagnostic ascitic fluid tapping 1 month before.

Ascitic fluid sent for examination; Reports inconclusive hence needs diagnostic laparoscopy for further management.

Investigations

Diagnostic tapping- Ascitic Fluid glucose- 98mg/dl

Ascitic Fluid protein- 5.8 g/dl

SAAG - 0.9

Genexpert MTB - Not detected

ADA - 62.40 U/L (0- 39 U/L)

Cytology Specimen:- Ascitic Fluid:- Smears studied are cellular. They show predominantly lymphocytes (70%) mesothelial cells (28%) and neutrophils (2%). Occasional macrophages noted. Background shows REC There is no evidence of atypical/malignant cells in smears studied

LDH - 219 U/L

Albumin- 2.8 g/dl

Ascitic fluid c/s - no organism detected

Total Nucleated Cells count- 2950 cells/cumm

Fluid Lymphocytes- 80% Polymorphs- 10%

Mesothelial cells- 10%

Fluid Red Blood Cells- 8-10/hpf

USG ABD PELVIS

Mild hepatomegaly with altered echotexture.

Right kidney shows slightly raised cortical echotexture with loss of corticomedullary differentiation.

Mild to moderate ascites.

CT Abdomen & Pelvis

Multiple enlarged lymph nodes are seen in retro-peritoneum in pre and para caval, pre and para aortic regions, aortocaval, retrocaval, along bilateral common iliac vessels, largest measuring 30 x 20 mm in paracaval region. Subcentimeter sized lymph nodes are noted in mesentery, preaortic, para aortic, right supradiaphragmatic region and in bilateral inguinal regions. No e/o necrosis/calcification noted. Fat planes between these lymph nodes and these structures appeared preserved. Mild to moderate free fluid in abdomen and pelvis. There is mild thickening and enhancement of peritoneal walls in the region of pelvis.

Impression

Hepatomegaly. Moderate fat stranding in greater omentum and in mesentery. - Abdominal lymphadenopathy. Possibility of metastatic lymphadenopathy cannot be ruled out. Primary neoplasm or mass lesion could not be identified on CT scan. Suggest:- PET-CT for further evaluation.

ESR - 34mm/hr

Zn stain - no AFB Detected

2D Echo heart

Conclusion:- AF NOTED DURING STUDY Normal chamber dimensions Moderate eccentric jet mitral regurgitation. Degenerative affection of aortic and mitral valve Mild aortic regurgitation, No RWMA, normal LV systolic function, LVEF-60% Grade I diastolic dysfunction Mild tricuspid regurgitation, mild PAH.

PET CT – 60years female with CT s/o multiple abdominal and retroperitoneal nodes for evaluation

- Metabolically active visceral peritoneal deposits and omental nodules are noted. Metabolically active mesenteric haziness is noted Metabolically active retroperitoneal and pelvic nodes Moderate ascitis. Features are more in favour of neoplastic aetiology? ovarian origin/ DD Koch's. Correlation with Ca 125 is recommended.

CA 125 - 200.3U/ml (0- 35 U / ml)

Hb - 12.5 gm%, WBC - 7000/cmm, RBC - 4.71 mill/cmm, PLT - 2.63 lac /cmm, BSL(R)-104mg/dl

BUL- 24 mg/dl, Sr. Creatinine- 1.6 mg/dl

HIV HBsAg - Negative

Urine - WNL

PT INR- 1.23

CXR – WNL

Hence planned for diagnostic laparoscopy with omental & peritoneal biopsy.

Surgical management

A) Pre operative

NBM 8 Hrs prior to surgery

Iv antibiotics

Inj Ceftriaxone 1 gm IV BD

Inj Metronidazole 500mg IV TDS

Inj Pan 40 mg IV BD

RT insertion

Foleys catheterization

IV Ringer lactate 1 pint slow

B) Anaesthesia

Anaesthesia – General anaesthesia.

1) Sedation – Inj. Midazolam 0.5mg IV.

Inj. Pentazocine 10mg IV.

Inj. Promethazine Hydrocloride10mg IV.

2) Induction – Inj. Propofol 120mg IV.

Inj. Succinylcholine Chloride 120mg IV. (Muscle relaxant)

3) Other drug – Inj. Dexamethasone 8mg IV.

C) Operative procedure

Patient in supine position: Painting & Draping done under all aseptic precautions. Trocar placement → Umbilical Open Scandinavian technique. Telescope passed

Diagnostic Laparoscopy done

Findings- Intraabdominal omental adhesions noted

Peritoneal tubercles & Ascitic fluid

Ipsilateral trocars placed left side of abdomen; One 10mm &another 5mm. Ascitic fluid collected & help of suction Cannula, omental peritoneal, biopsy taken with help of bipolar diathermy. Haemostasis achieved .Specimen collected for histopathological examination.

Layerwise closure done i.e Rectus sheath closed with vicryl 2-0 & Skin closure done with Ethilon 2-0. Dressing with betadine done. Patient shifted to ward in good condition.

Table 1: Showingfindings in diagnostic laparoscopy.

 **a)Peritoneal tubercles.**	 **c) Ascitic fluid.**
 **b) Intraabdominal adhesions.**	 **d) Omental thickening.**

D) Histopathological reports

Specimen-1, omental biopsy. for HPE

2. Peritoneal biopsy for HPE

Impression:- Omental & Peritoneal biopsy

Tubercular inflammation No elo malignancy

Adenosine deaminase- Ascitic fluid 77.40U/L (positive >60)

Ascitic fluid for cytology

Impression -Ascitic fluid with lymphocytosis. No malignant cells seen

Post operative care

E) Post-operative care and follow-ups

IV antibiotics, analgesic and IV fluids were administered.

Ryles tube and foleys catheter removal on 2nd day

AKT started for confirmatory Diagnosis i.e. Abdominal Koch's.

DISCUSSION

Chronic abdominal conditions have been a challenge. Prior to the era of diagnostic laparoscopy, these patients used to undergo a battery of expensive investigations, while remaining dissatisfied. The search for pathology in these patients usually entailed a series of laboratory and invasive tests. Surgeons are consulted when the pathology is unclear or tissue diagnosis is required. Diagnostic laparoscopy provides an intermediate option avoiding full exploratory laparotomy and minimizing the surgical trauma in chronically ill patients. As the purpose of this study was to evaluate the role of laparoscopy as a major diagnostic tool in patients presenting with a chronic abdominal condition, with uncertain diagnosis, it has been clearly observed that laparoscopy has higher diagnostic rate.

CONCLUSION

With laparoscopy providing tissue diagnosis, and helping to achieve the final diagnosis without any significant complication and less operative time, it can be safely concluded that diagnostic laparoscopy is a safe, quick, and effective adjunct to non-surgical diagnostic modalities, for establishing a conclusive diagnosis, but whether it will replace imaging studies as a primary modality for diagnosis needs more evidence.

REFERENCES

1. Udwadia TE, Udwadia RT, Menon K, Kaul P, Kukreja L, Jain R, et al. Laparoscopic surgery in the developing world. An overview of the Indian scene. *Int Surg,* 1995; 80: 371–5.
2. El-Labban GM, Hokkam EN. The efficacy of laparoscopy in the diagnosis and management of chronic abdominal pain. *J Minim Access Surg,* 2010; 6: 95–9.
3. Ferrell BR. The impact of pain on quality of life. A decade of research. *Nurs Clin North Am,* 1995; 30: 609–24.
4. Magni G, Rossi MR, Rigatti-Luchini S, Merskey H. Chronic abdominal pain and depression. Epidemiologie findings in the United States. Hispanic health and nutrition examination survey. *Pain,* 1992; 49: 77–85.
5. Easter DW, Cuschieri A, Nathanson LK, Lavelle-Jones M. The utility of diagnostic laparoscopy for abdominal disorders. Audit of 120 patients. *Arch Surg,* 1992; 127: 379–83.