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A COMPARATIVE STUDY OF POST OPERATIVE PORT SITE PAIN AFTER GALLBLADDER RETRIEVAL FROM UMBILICAL VERSUS EPIGASTRIC PORT AT KMC, KATIHAR

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Abstract :
Laparoscopic cholecystectomy was 1st performed in 1987. It is considered as gold standard treatment for laparoscopic cholecystectomy. Post operative pain is one of the reason for overnight hospital stay. The aim of the study is to validate whether gall bladder retrieval from epigastric port was associated with more pain as compared to retrieval from umbilical port in adult patients undergoing standard four ports elective laparoscopy cholecystectomy. A study of six months was conducted at Katihar Medical college, Katihar from july 2019 till February 2020. From this study it is concluded that gall bladder retrieval from umbilical port is better as compared to epigastric port in terms of post operative port site pain. Hence gall bladder retrieval through umbilical port may be preferred for reduction of port site pain.
Keywords : cholelithiasis , laparoscopic cholecysytectomy, port site pain.

INTRODUCTION :

- Laparoscopic cholecystectomy was 1st performed in 1987.
- It is considered as gold standard treatment for laparoscopic cholecystectomy.
- Post operative pain is one of the reason for overnight hospital stay.
- GB retrieval is an important cause for post operative pain.
- Extraction – usually from epigastric/umbilical port , based on surgeon's choice

Aims and objective :

- To validate whether gall bladder retrieval from epigastric port was associated with more pain as compared to retrieval from umbilical port in adult patients undergoing standard four ports elective laparoscopy cholecystectomy.

MATERIALS AND METHODS :

- It was a cross sectional prospective study conducted in KMC, Katihar.
- Duration of study: 6 months July 2019- February 2020
- Place of study : Dept. of General Surgery, KMC, Katihar.
- Sample size : 100 patients with 50 in each group
- Statistical tools used : Chi- square test, SPSS version 1.0.0.1406 statistical tool for the analysis.
- Inclusion criteria :

Age : 18-70 years
Benign GB disease
Four port laparoscopic cholecystectomy

- Exclusion criteria :
  Suspicious/proven GB malignancy
  Bleeding diathesis
  Obstructive jaundice

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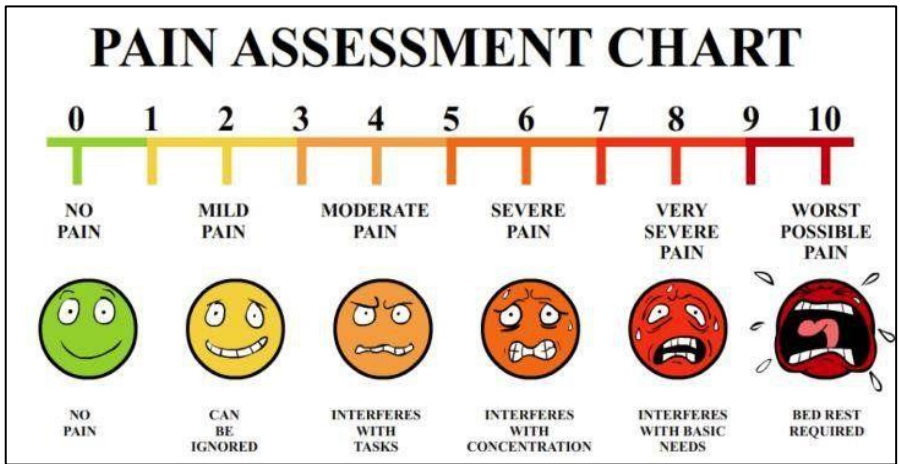
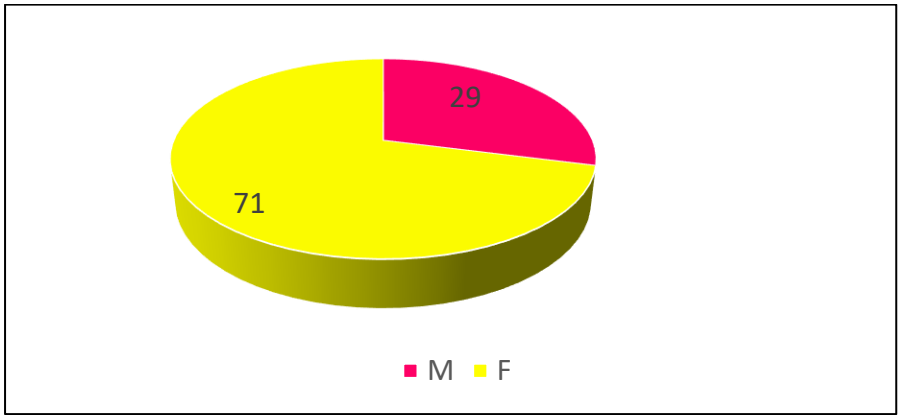
Port site extension
Viral marker Positive cases.

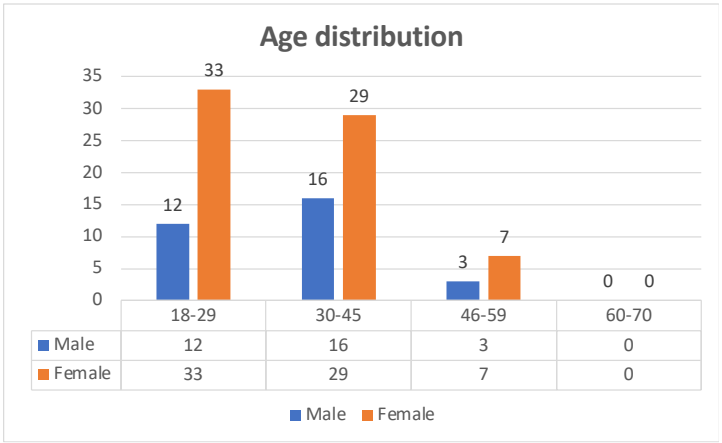
- Group A : First 50 patients : GB retrieval from epigastric port
- Group B : Next 50 patients : GB retrieval from umbilical port
- Post- op analgesia : iv paracetamol 15 mg/kg/8hr
- Port site pain : assessed with Visual Analog Scale (VAS) ranging from 0 to 10 at 1,6,12,24 hours post operatively.
- Additional analgesia : VAS 7 or more . i.m. Diclofenac – 1.5 mg/kg or Tramadol – 1 mg/kg SOS



RESULT :



Male : Female ratio is 29 : 71.



Maximum female between the age group of 18-29 suffered from cholecystectomy. Minimum age group of female suffering from cholecystectomy is 46 – 59 years. Maximum male age group suffering from cholecystectomy is 30 – 45 years.

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Variables	Group A	Group B	P values
Age (in years)	33.38± 10.5	31.12± 7.6	0.206
Sex	16	15	0.001
Male	34	35	
Female	47	48	
Indication of surgery	3	2	
Symptomatic gall stone	6.00 ± 1.29	8.44 ± 1.56	
Gall Bladder Polyp	1.210 ± 0.935	1.210 ± 0.935	
Time taken for gall bladder retrieval (mins)	0.370 ± 0.630	0.370 ± 0.630	
Additional analgesia			
Avg. dose of diclofenac (mg)			
Avg. dose of tramadol (mg)			

Pain score :

Pain score	Group A (Epigastric port)	Group B (Umbilical port)
At 1 hr	6.640 ± 1.494	5.500 ± 1.176
At 6 hr	6.620 ± 1.549	5.320 ± 1.188
At 12 hr	6.100 ± 1.549	4.660 ± 1.232
At 24 hr	5.250 ± 1.459	3.970 ± 1.274

Group	Total no. of patients requiring additional analgesia	Additional analgesia for pain at umbilical port
A (n=50)	34	8
B (n=50)	33	9

Discussion :

- Age : Group A vs. B – 33.48 ± 10.6 vs 31.10 ± 7.8 – similar to result of Siddiqui et. al. and Bashir et. al. 42.5 ± 10.7 vs 40.6 ± 12.6 and 47.49 ± 9.4 vs 46.84 ± 5.60 respectively.
- Percentage of female 69% - similar to shakya JPS et. al. 75%. Siddiqui et al 76 %, Bashir et al 56% and Ahmad et al 60 % -- (p=0.001)
- Average pain score – epigastric (group A) > umbilical port 6.640 vs 5.500 , 6.620 vs 5.320, 6.100 vs 4.660, 5.250 vs 3.970 at 1,6,12,24 hrs. respectively. Similar to Shakya et al & Siddiqui et al.
- It is Contrary to Ahmad et al and Basheer et al for both port
- Also contrary to Abbas et al – epigastric port was better.
- Time taken for retrieval – umbilical >epigastric – similar to Siddiqui et al.

Conclusion :

- From this study it is concluded that gall bladder retrieval from umbilical port is better as compared to epigastric port in terms of post operative port site pain.
- Hence gall bladder retrieval through umbilical port may be preferred for reduction of port site pain.

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