

The role of ultrasound in evaluating patients with biliary obstruction in king Faysal General Hospital, kingdom of Saudi.Arabia,Taif City

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Abstract: Main center of research for this study is role of ultrasound in evaluating patients with biliary obstruction in king Faysal General Hospital, kingdom of Saudi.Arabia ,Taif City. **The main results of this study are:** 1) Ultrasound examination can demonstrate biliary obstructions. 2) Regarding the type of obstruction and main causes of obstruction ultrasound examinations of the gallbladder can detect stone, sludge and other complication diseases, according to my study, ultrasound can detect gallbladder diseases with accuracy of more 96% 3) According to the relationship of biliary tree especially common bile duct and common hepatic duct to the portal vein, hepatic artery and the duodenum, ultrasound can detect obstruction, stricture or any compression due to tumor with accuracy more than 94% with good quality ultrasound machine, good patient's preparations and experience skill sonographer, especially in the distal part of common bile duct due to the duodenum bowel and gases obscuring the duct. magnetic resonance image help us in reporting, follow up & for data reference which helps in the research. 4) According to my study biliary obstruction are more incidences with patient's weight, and increases in females more than males.

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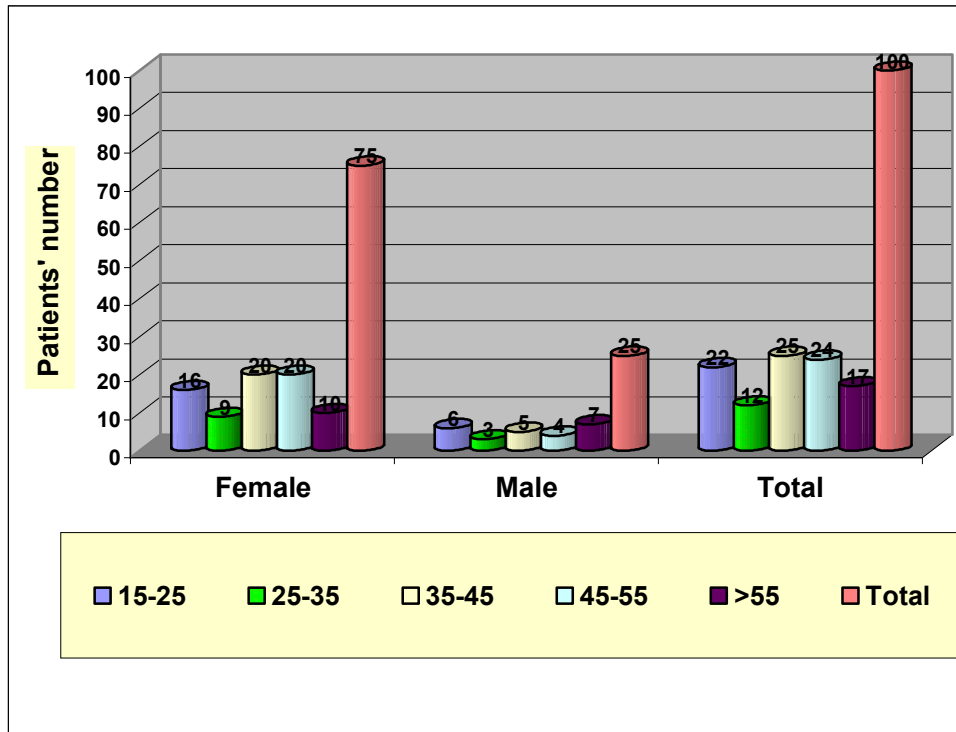
Keywords: ultrasound; patient; biliary; obstruction

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IV-1-Data Presentation

Table: 1 Sex with Age

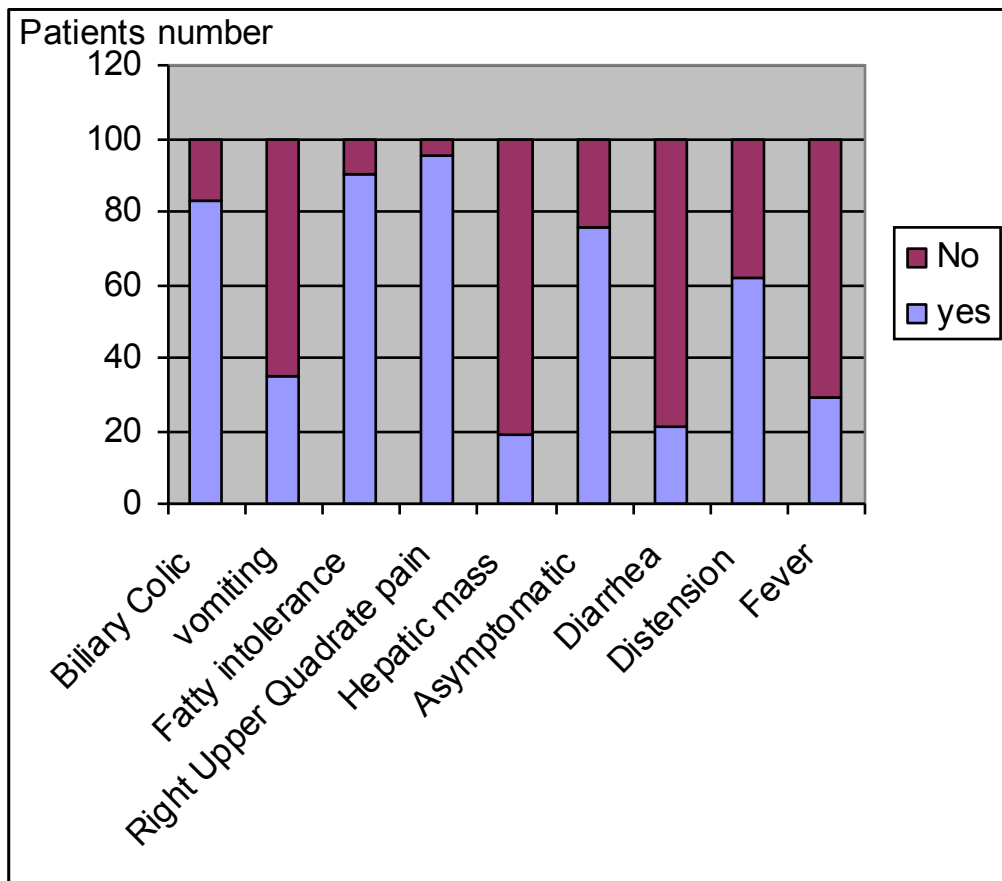
| Age | Male | % | Female | % | Total |
|--------------|------|-----|--------|------|-------|
| 15-25 | 6 | 24 | 16 | 21.3 | 22 |
| 25-35 | 3 | 12 | 9 | 12 | 12 |
| 35-45 | 5 | 20 | 20 | 26.7 | 25 |
| 45-55 | 4 | 16 | 20 | 26.7 | 24 |
| >55 | 7 | 28 | 10 | 13.3 | 17 |
| Total | 25 | 100 | 75 | 100 | 100 |



Graph: 1 Sex with Age

Table: 2 Clinical Features

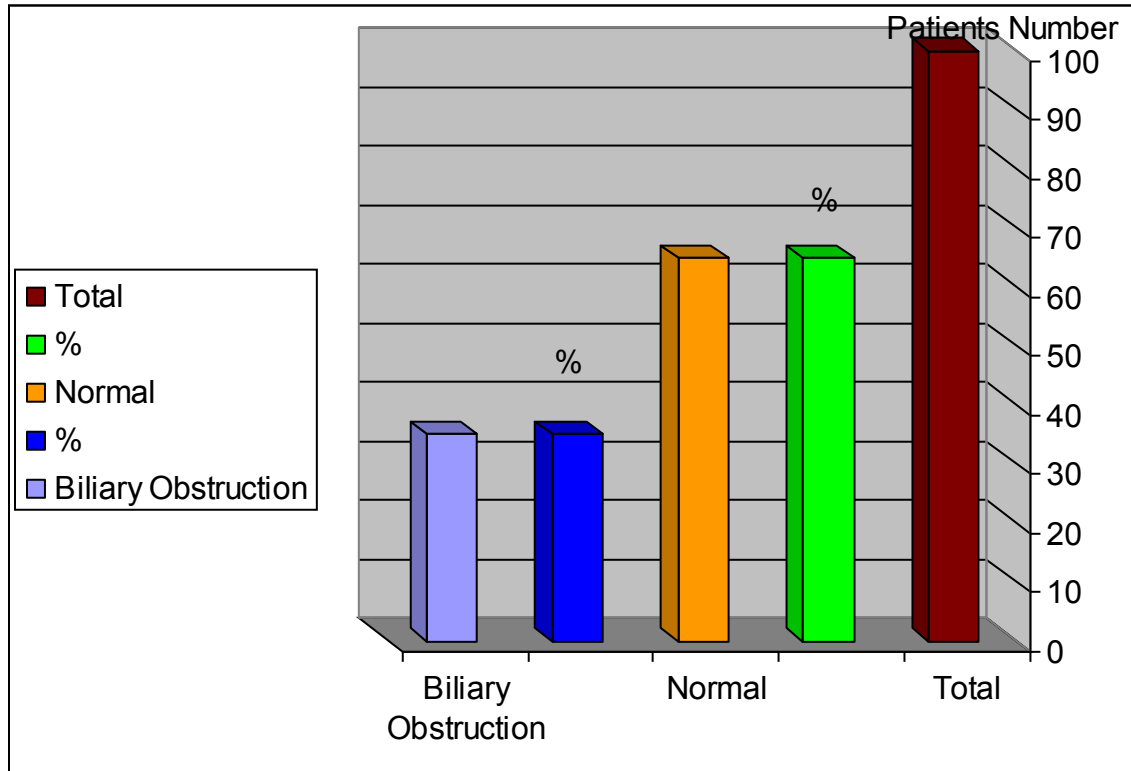
| Clinical feature | yes | No |
|---------------------------|-----|----|
| Biliary Colic | 83 | 17 |
| vomiting | 35 | 65 |
| Fatty intolerance | 90 | 10 |
| Right Upper Quadrate pain | 95 | 5 |
| Hepatic mass | 19 | 81 |
| Asymptomatic | 76 | 24 |
| Diarrhea | 21 | 79 |
| Distension | 62 | 38 |
| Fever | 29 | 71 |



Graph: 2 Clinical Features

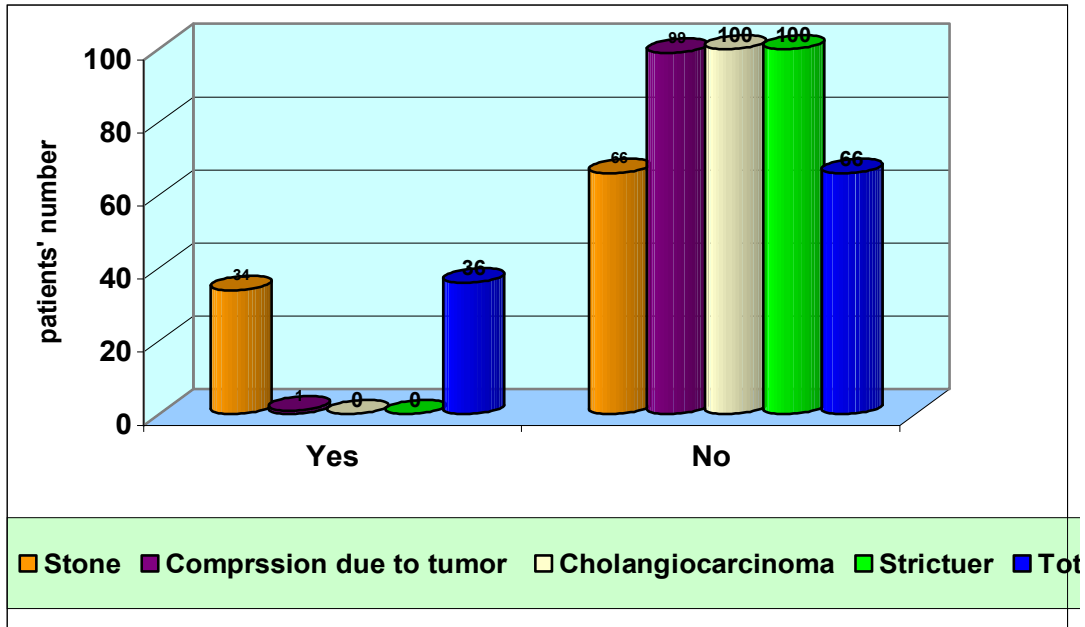
Table: 4 Ultrasound Findings (Results)

| | | | | |
|----------------------------|----------|---------------|----------|--------------|
| Biliary Obstruction | % | Normal | % | Total |
| 35 | 35 | 65 | 65 | 100 |



Graph: 4 Ultrasound Findings

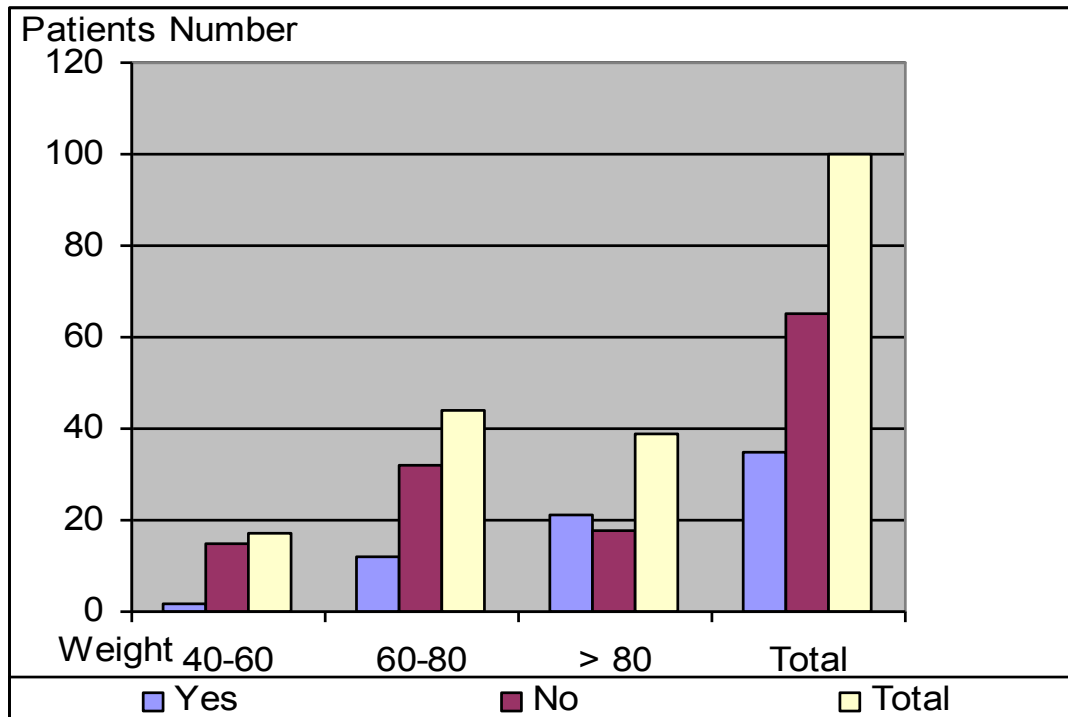
| Causes | Yes | % | No | % | Total |
|-------------------------|-----------|------------|-----------|------------|------------|
| Stone | 34 | 34% | 66 | 66% | 100 |
| Comprssion due to tumor | 1 | 1% | 99 | 99% | 100 |
| Cholangiocarcinoma | 0 | 0% | 100 | 100% | 100 |
| Stricture | 0 | 0% | 100 | 100% | 100 |
| Total | 36 | 36% | 66 | 66% | 100 |



Graph: 5 Causes of Obstruction

Table :(6) Biliary Obstruction with weight

| Weight | Yes | % | No | % | Total |
|--------|-----|------|----|------|-------|
| 40-60 | 2 | 5.7 | 15 | 23.1 | 17 |
| 60-80 | 12 | 34.3 | 32 | 49.2 | 44 |
| > 80 | 21 | 60 | 18 | 27.7 | 39 |
| Total | 35 | 100 | 65 | 100 | 100 |



Graph: (6) Biliary Obstruction with weight

Result and CONCLUSION:

In this study the diagnostic accuracy of ultrasound in the gallbladder was more than 96% and in the common bile duct more than 94% we can say the accuracy of ultrasound in biliary system obstruction is more than 95% where it assists in providing guidance for the procedure.

Finally out of all the mentioned facts ultrasound is playing an essential role in the

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