Method: Twenty-one patients were included in this series from the age group ranging from 6 days to 5 years. All were diagnosed to have a liver tumor clinically, on ultrasonography (USG) and computed tomography (CT) scan. Biopsy was done in 10 patients and in all α -fetoprotein (AFP) levels were done. All were subjected to surgical resection either directly or after 2–3 cycles of chemotherapy. Postoperative care was given to all. On follow-up, AFP levels were repeated and USG was done. Maximum follow-up was 5 years.

Result: Eighteen patients survived. Three died in perioperative period, one required re-exploration, one had bile leak, and one had wound infection. There were no recurrences in our series.

Conclusion: Pediatric liver resections are needed mostly for hepatoblastoma and hemangioendothelioma. AFP levels are always raised and are good prognostic markers as well. Pre-operative chemotherapy is indicated in large or inoperable tumors. Major complications like hemorrhagic shock, air embolism, and bile leak can be fatal. Improving the results is possible with specialized training, improved pre-operative and intra-operative imaging and better ICU care. There is a significant learning curve in doing successful liver resections in children.

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CYSTOPERICYSTECTOMY—PATIENT SELECTION IS ESSENTIAL

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Background: Cystopericystectomy is one of the major hepatic resections for benign lesion, needs proper selection of patient in comparison with partial cystectomies for hydatid disease.

Aim: To compare the feasibility of cystopericystectomy with conventional partial cystectomies for hydatid cysts of liver.

Materials and Method: We present a study of liver hydatid cysts over a span of 6 years, where patients were admitted in a secondary healthcare setup of district level hospital. Patients' age ranged from 6 years to 65 years, with some of them having comorbid conditions such as diabetes mellitus, chronic obstructive lung disease, and ischemic heart disease. We included 112 patients out of whom 102 were subjected to conventional partial cystectomies and 10 had undergone liver resection in the form of cystopericystectomy. We compared the outcomes in various categories including the time required for surgery, ease of operation, blood requirements, complications, recurrence, morbidity, and mortality.

Result: Both of these procedures were equally effective as far as cyst clearance was concerned, as we have not seen recurrence in this period of 6 years. However, partial cystectomies

scored over cystopericystectomy as far as timing, ease of operation, and blood requirements were concerned. We had one biliary fistula in partial cystectomy and one death due to torrential bleed from middle hepatic vein in the cystopericystectomy group.

Conclusion: Cystopericystectomy should be considered in patient fit for major liver resection without any comorbidity and it can be kept reserved for infected hydatid cysts, where biliary communication is difficult to handle in partial cystectomy.

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ETIOLOGY OF RENAL DYSFUNCTION IN CIRRHOSIS

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Background: Renal dysfunction in cirrhosis may be due to prerenal or renal causes or due to hepato-renal syndrome. It is a poor prognostic marker and has a high mortality.

Aim: To determine the etiology of renal dysfunction in cirrhosis and its outcome.

Method: Patients with cirrhosis admitted in the last 1 year were included. All underwent routine investigations including hemogram, liver profile, blood urea nitrogen, creatinine, chest X-ray, and urine routine. Patients with renal dysfunction were defined as serum creatinine >1.5 mg/dL. They were further evaluated with abdominal ultrasonography, urine sodium/potassium, urine albumin; 24 hour urinary albumin, serum IgA, C3, and C4 levels when necessary. Patients were divided into infection-related renal failure; hypovolemia-induced renal failure, intrinsic renal dysfunction, and hepato-renal syndrome (HRS) (not due to infection).

Result: One-hundred and thirty-five (119 males) patients were included. The etiology of cirrhosis was alcohol 95, hepatitis B 13, non-alcoholic steatohepatitis (NASH) 10, cryptogenic 7, hepatitis C 6, autoimmune hepatitis (AIH) 3, and hepatitis B+ hepatitis C 1. Mean model for end stage liver disease (MELD) score was 15 ± 3 . Renal dysfunction was noted in 46 patients (35%). Infection-related renal dysfunction occurred in 20 (43.48%), hypovolemia 16 (34.78%), renal disease 7 (15.22%), and HRS (not due to infection) in 3 (6.5%), (2 expired and 1 underwent transjugular intrahepatic porto-systemic shunt [TIPSS]). Renal dysfunction because of infection was due to spontaneous bacterial peritonitis 14, pneumonia 3, urinary tract infection (UTI) 2 and cellulitis 1. Renal dysfunction because of hypovolemia was due to gastrointestinal blood loss 8, diuretics 6 and diarrhea 2. Cause of intrinsic renal disease was NASH (diabetic nephropathy) 3, alcoholic (IgA nephropathy) 2, and viral hepatitis (glomerulonephritis) 2. Mortality in patients with renal dysfunction was 16 out of

46 patients (35%) with 12 of 16 (75%) having infection-related renal dysfunction, 2 (12.5%) with hypovolemia, 2 (12.5%) with HRS. Most of the mortality occurred in alcoholic cirrhosis (14 patients).

Conclusion: The most common cause of renal dysfunction was infection which led to a high mortality in patients with cirrhosis.

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PREVALENCE OF HEPATITIS E VIRUS INFECTION AMONG PREGNANT WOMEN IN RAJASTHAN

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Background: Hepatitis E virus (HEV) is highly endemic in developing countries with high mortality rate among pregnant women. The prevalence of antibodies and RNA to HEV in Rajasthan is not known.

Aim: To evaluate the prevalence of hepatitis E infection among pregnant women at the SMS Medical College and Hospital Jaipur, Rajasthan, India.

Method: Pregnant females attending antenatal clinic attached to SMS Medical College between January 2010 and December 2010 who required blood sample for hemoglobin and blood group analysis were anonymously tested for the presence of anti-HEV IgG, anti-HEV IgM, and HEV RNA.

Result: Two-hundred and thirty-six pregnant women provided blood samples for unlinked anonymous testing for the presence of antibodies to HEV. The median age of participants was 28.89 ± 5.76 years. Among 236 women tested, HEV seroprevalence was 28.81%. Among the seropositive women, 64.40% tested positive for anti-HEV IgM while 35.60% tested positive to HEV IgG antibodies. HEV seroprevalence was highest (46.15%) among women 21–25 years of age, followed by 42.82% in <20-year group, then 36.84% in >26-year group. Of 236 women, 75.79% and 22.92% were in their third and second trimesters of pregnancy, respectively. Anti-HEV antibodies detected in women in their third trimester of pregnancy (30.25%) was significantly higher, $P < 0.05$ than in women in their second trimester of pregnancy (25.0%). Of 236, 29.20% were positive for HEV RNA.

Conclusion: The results of our studies revealed a high prevalence of HEV infection in pregnant women.

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RETROSPECTIVE STUDY OF ISOLATED HEPATIC INJURY

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Background: During the last decade, there has been a change in the therapeutic protocols related to liver trauma, and surgery is no longer the only option available.

Aim: The aim of this study was to analyze the effectiveness and the morbidity–mortality of both conservative vs surgical treatment in a series of 50 patients with isolated hepatic injury during the last year.

Method: In this retrospective study of 50 patients, variables analyzed included demographic data, injury classification, surgical treatment, transfusions, morbidity–mortality, and hospital stay. The liver trauma was classified according to the Hepatic Injury Scale of the American Association for the Surgery of Trauma. Grade I: 8 cases; grade II: 14 cases; grade III: 20 cases; grade IV: 6 cases; and grade V: 2 cases. Of 42 patients from grades 1 to 3, 37 patients were managed conservatively with the mean hospital stay of 9 days without any complications with the mean blood transfusion of 2 units. Rest of the 5 patients had to be operated due to failure of conservative trial. Five patients from grade 4 were treated conservatively with successful results. Three patients with grade 4 and 5 liver trauma were operated with 66% mortality rate. Surgical technique included limited resection-debridement, live vascular ligation, and perihepatic packing.

Result: If the right determinants with accurate diagnosis are clearly defined for isolated hepatic trauma, conservative management for grades I, II, and III is the best treatment option while grades IV and V need further evaluation.

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HEPATIC RESECTION—SCOPE FOR GENERAL SURGEON!

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Background: Hepatic resection has evolved over 50 years. In India, every general surgery department has a dream for successful liver resection, in spite of the scarcity of sophisticated instrument for liver resection such as Cavitron ultrasonic surgical aspirator (CUSA), argon beam coagulator, hydro-jet dissector, and harmonic scalpel. These devices are available only in few well-set gastrointestinal and hepatobiliary pancreatic surgical units.

Aim: Liver resection is possible by understanding of hepatic anatomy and precise technique.