Antimicrobial Prophylaxis After Hepatic Resection for Hepatocellular Carcinoma: A Propensity Score Matching Study

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Background Hepatic resection (HR) is one of the curative treatments for hepatocellular carcinoma (HCC) and infection is a common complication after HR. For clean-contaminated surgery, the guideline recommends only preoperative prophylactic antibiotics; however, antibiotics are frequently used postoperatively in reality. We investigate whether postoperative prophylactic antibiotics can reduce infection for HR.

Methods From January 2009 to December 2017, patients whom underwent HR for Barcelona Clinic Liver Cancer (BCLC) stage 0/A/B HCC in three tertiary referral centers were included in the study. Patients were divided into two groups according to whether they used prophylactic antibiotics postoperatively or not. One group did not use antibiotics after HR (group A), and the other group did (group B). The infection rates were estimated and compared between the two groups before and after matching the propensity scores.

Results In total, 1049 patients were included, with 273 patients in group A and 776 patients in group B. The median days of postoperative antibiotic use in group B is 5.0 days (interquartile range [IQR], 3.0–7.0 days). The infection rate was 27.5% and 6.8% in group A and B, respectively (P<0.001). Prothrombin time > 14 seconds (OR 2.05, 95% CI 1.10–3.83), albumin < 35 g/L (OR 1.89, 95% CI 1.01–3.54) and postoperative prophylactic antibiotics (OR 0.20, 95% CI 0.14–0.30) were independently associated with infection. After matching the propensity scores, the infection rates in the group A (n=260) and B were 28.1% and 8.5%, respectively (P<0.001).

Conclusions Postoperative prophylactic antibiotics can reduce the incidence of infection after HR for HCC.

Assessment of Hepatic Steatosis in Patients with Anorexia Nervosa Using Quantitative Elastography

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Background The number of patients with anorexia nervosa (AN) is increasing as society changes. Approximately 30% of patients with AN have mild liver injury. A part of patients with AN has been reported to present fatty liver change despite of their extremely low body mass index (BMI). Recently, quantification of hepatic fat content is available by FibroScan using a controlled attenuation parameter (CAP) software. In this study, we conducted the FibroScan measurement in patients with AN to assess their steatosis.

Methods Eighteen patients hospitalized with a diagnosis of AN were enrolled. Clinical parameters such as age, gender, BMI, as well as routine laboratory data were evaluated. We also assessed their hepatic steatosis by using a CAP software. We defined the level of CAP over 200 (dB/m) as cut off value for hepatic steatosis, and compared these clinical parameters among non-fatty (non-FL) group (9 patients, levels of CAP<200) and fatty liver (FL) group (9 patients, levels of CAP>200).

Results All the enrolled subjects were female with a median age of 33.5 (13–62) years and BMI 13.4 kg/m². Their mean lab data was: serum ALT 146.6±344.4, GGT 44.0±46.9, T-chol 194.2±44.3, TG 72.4±33.5, the mean levels of CAP 214.6±54.4, hepatic stiffness 5.7±1.6 kPa. Ten patients (55%) was positive for LK contrast. After medical treatment for 4 weeks, the levels of CAP in FL group decreased 248±55.6 to 207.5±29.1 (p=0.042), and of those in non-FL group increased 176.7±9.9 to 190.1±31.5. The changes of serum T-chol and TG in FL group were: 172.8±35.8 to 210.6±38.2 (p=0.033), and 63.1±15.9 to 84.5±33.8, whereas those in non-FL group were: 215.5±41.7 to 185.2±41.7, and 81.7±20.7 to 63.1±15.9, respectively.

Conclusions After 4 intervention, the levels of CAP in FL group decreased, and sonographic hepatic steatosis was improved. Further studies are feasible to clarify the mechanism of steatosis in patients with AN.

Long-Term Outcomes of Utilizing Extended Criteria Deceased Donors in Liver Transplantation – An Australian 12-Year Cohort Study

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Background The need for liver transplantation (LT) is increasing worldwide; however, organ shortage presents a major limitation. Use of extended criteria donors (ECDs) has been one
strategy to increase the donor pool. Long-term outcomes in recipients of ECD livers have not been well studied. We studied the characteristics, utilization and recipient outcomes of ECDs.

Methods We retrospectively studied consecutive adults who underwent deceased LT between 2006–2018. Donor and recipient data at LT and recipient outcomes were collected from a prospective database. ECD was defined using Eurotransplant criteria as any of these donor characteristics: age >65 years, ventilation >7 days, BMI >30 kg/m2, liver steatosis >40%, sodium >165 mmol/L, ALT >105 U/L or AST >90 U/L, and bilirubin >51 umol/L. The primary outcome of interest was graft survival (time to retransplantation or death).

Results During the study period (median follow-up 50.6 months), 739 donors were utilized for LT. Of these, 432 results were predictive for poorer graft survival. Among patients utilizing grafts did not change over time. 157 patients experienced graft loss during follow-up (31 retransplants, 126 deaths). ECDs had similar long-term graft survival compared to non-ECDs, although outcomes appeared to be worse when ≥3 criteria were met (figure 1A–B). No individual ECD criteria were predictive for poorer graft survival. Among patients transplanted for HCC, ECD vs. non-ECD grafts resulted in similar recurrence-free survival (figure 1C).

Conclusions ECD livers meeting up to 2 Eurotransplant criteria can be safely used without impacting long-term graft survival. This has implications for organ utilization.

IDDF2019-ABS-0222 EXCHANGE TRANSFUSION IN NEONATAL HYPERBILIRUBINEMIA AND BILIRUBINENCEPHALOPATHY: A LONG WAY TO GO

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Background Hyperbilirubinemia is the most common morbidity in neonates. Exchange transfusion (ECT) has an important role in the prevention of Bilirubin Encephalopathy in neonates.

Aim To evaluate the incidence and risk factors of Bilirubin Encephalopathy in neonates presenting with neonatal hyperbilirubinemia requiring ECT.

Subjects All neonates admitted with hyperbilirubinemia requiring exchange transfusion.

Methods Retrospective study undertaken exchange transfusion over a period of 30 months in a level III extramural Neonatal Intensive care Unit of Delhi. Demographic data, etiology of jaundice, the presence of encephalopathy, details of ECT and ECT-related adverse events were analyzed.

Results Total of 1675 neonates were admitted, out of which 136 (8.1%) neonates underwent exchange transfusion. The mean(SD) gestational age and mean weight(SD) on admission were 36±3 weeks and 2144.5±678 gram respectively. The mean age of presentation was 5.48±3.9 days and the mean day on which jaundice appeared was 4.9±3.33 days.

The mean bilirubin on presentation and duration of phototherapy were 24.2±5.8 mg/dl and 3.2±1.7 days respectively. Of 136 neonates, 20 (14.7%) were home delivered. Sepsis 49(36%) was the most common cause of NNH requiring ECT. Other causes were ABO incompatibility (21.3%), Rh incompatibility (11.7%), hypothyroidism (3.6%), G6PD deficiency (0.7%) and Idiopathic. Five (3.6%) neonates were blood culture positive. ECT through umbilical route was done in 115 (84.5%) and through peripheral route in 21 (15.4%). More than one ECTs were required in 5 (3.6%). The complications of ECT were hypocalcaemia (38.2%), thrombocytopenia (17.6%) and hypothermia (11%). Thirty-nine neonates (28.6%) had encephalopathy on admission; the mean day of presentation, weight and bilirubin in these neonates were 5.5±3.7 days, 2142±763 grams, 26.9±6.13 mg/dl respectively.

Conclusions The incidence of NNH developing Bilirubin encephalopathy is still very high in our country, most probably because of early discharge, loss to follow up and delay in diagnosis and treatment. Timely intervention and proper counseling of mother at the time of discharge after birth is very important to prevent encephalopathy in neonates with NNH

IDDF2019-ABS-0237 CLINICO-ETOIOLOGICAL PROFILE OF HEPATOCELLULAR CARCINOMA AT A TERTIARY HOSPITAL IN COASTAL INDIA

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Background Hepatocellular carcinoma (HCC) is a primary malignancy of the liver and is apparent as the main cause of death in patients with liver cirrhosis or chronic hepatitis B or C virus infection. It is emerging as a major leading cause of cancer mortality.

In India, the mean incidence of Hepatocellular carcinoma is 2.77% for males and 1.38% for females based on the population registry.

Our study aims to assess the clinico-etiological profile of HCC at a tertiary hospital in India.

Methods

- Cross-sectional, observational and hospital-based retrospective study. Patients diagnosed as HCC from Jan 2014 to Feb 2019, registered in Hepatocellular Cancer Registry and admitted to the hospital, were reviewed.

- Clinical, biochemical, serological and radiological details were noted from case records and analysed.

Abstract IDDF2019-ABS-0237 Table 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Number of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Lobe Involvement</td>
<td>34 (64.15%)</td>
</tr>
<tr>
<td>Left Lobe Involvement</td>
<td>03 (5.66%)</td>
</tr>
<tr>
<td>Bilobar Involvement</td>
<td>16 (30.18%)</td>
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