

Scientific Session 6

Should delayed cholecystectomy following acute cholecystitis be discouraged in a resource-constrained environment?

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Objective: Early cholecystectomy for acute cholecystitis reduces hospital stay and the risk of complications during the waiting period for surgery. The purpose of this study is to establish the practice patterns in the management of acute cholecystitis at the University Hospital of the West Indies (UHWI) and to evaluate the advantages of early over delayed cholecystectomy in our patient population.

Subjects and Methods: Patients admitted to the surgical service at UHWI between January 2008 and December 2010 with a diagnosis of acute calculous cholecystitis were retrospectively evaluated. Data included demographics, management strategy, timing to cholecystectomy, significant events while awaiting cholecystectomy and total duration of hospital stay. Mann-Whitney U and Chi-square tests were used for non-parametric scale and categorical variables, respectively. *P*-value of < 0.05 was considered significant.

Results: A total of 116 patient charts were extracted, 59 of which were managed conservatively and 43 managed with cholecystectomy during the same admission. Fourteen patients were excluded from analysis due to conditions requiring delay in surgery. The mean time to surgery after conservative management was 173 days; 30.5% of persons managed conservatively had significant attacks which included need for re-admission and biliary pancreatitis while awaiting surgery. There was no significant difference in the mean total hospital stay between groups ($\mu_{sx} = 3.8$, $\mu_{Cons} = 3.3$; *p* = 0.061).

Conclusion: Conservative management of acute cholecystitis results in significant delays in definitive management, risks of complications during the waiting period and patient defaulting from management. Early cholecystectomy should be encouraged even in resource-constrained setting.

Acute cholecystitis: feasibility of an emergent laparoscopic approach in a Caribbean nation

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Objective: To assess the clinical outcomes of emergent laparoscopic cholecystectomy for acute cholecystitis.

Design and Methods: A prospective database of all cholecystectomies was maintained. The database was accessed to evaluate all emergent operations performed for acute cholecystitis over five years from February 2008 to February 2013. The following data were analysed: demographics, operative details, operation time, morbidity, mortality, hospitalization and patient satisfaction.

Results: There were 63 emergent laparoscopic operations done for acute cholecystitis in patients, with an average age of 44.7 ± 11.6 years and an average body mass index (BMI) of 32.1 ± 6.4 kg/m². Overall, 54 (85.7%) had uncomplicated cholecystitis and there was complicated acute cholecystitis in nine cases: gallbladder empyema (8) and gangrenous cholecystitis (1). One (1.6%) conversion was required in this series. Emergency laparoscopic cholecystectomies were completed in a mean operating time of 94.8 ± 40.9 minutes with mean blood loss of 93 ± 108.5 mls. There was 7.94% overall morbidity, no mortality and 3.8 ± 1.7 days average hospitalization. The patients returned to work after 7.2 ± 4.4 days with a mean satisfaction score of 9.2 ± 1.2 .

Conclusions: In this setting, emergent laparoscopic cholecystectomy for acute cholecystitis is feasible and can be performed with acceptable morbidity, conversion rates and patient satisfaction.

Hernia mission in Ecuador: challenges, perspectives and lessons learned

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Objective: To deliver high quality, safe hernia surgery in rural Ecuador.

Methods: Each year, healthcare professionals journey to remote communities all over the world for Operation Hernia, to help people who are unable to afford or access treatment. Local doctors screened more than 120 patients and invited patients to be reviewed by the three consultants on the team. Over 100 patients were examined the day before surgery commenced and those with hernias were scheduled over the following five days. Three operating tables were available: two in the back room of a public healthcare centre and the third in a mobile unit.

Results: Eighty-seven patients underwent various hernia repairs. Forty-one per cent were umbilical, 39% inguinal (unilateral and bilateral), 12% incisional, 3% femoral and one patient had a lumbar hernia.

Fifty-three per cent of the hernias were reducible and 88% were primary repairs. Thirty-five per cent of patients received onlay mosquito net meshes, 5% mosquito net mesh plugs and 16% either prolene or composite mesh. Forty-four per cent had primary suture repairs. Sixty-six per cent were male and the average age was 40 (8/12 – 82) years. On average, patients had noticed or been diagnosed with a hernia for 7.6 years. Twenty-three per cent of all patients received spinal, 12% general (all children) and 65% local anaesthesia. There were three complications – a haematoma that required drainage, a patient with scrotal oedema and a diabetic patient with uncontrolled blood glucose levels who was transferred to the district hospital. The challenges included non-adjustable operating tables, no overhead lighting, no monitors, inadequate instruments, poor scrubbing up facilities plus language/communications barriers.

Conclusion: Hernia surgery can be safe and effective even in primitive conditions. It questions whether we overspend on this type of surgery in developed countries. Working for such a mission is beneficial to all levels of surgeons and should be encouraged.

An analysis of 144 parotid lesions from three main centres in Trinidad and Tobago

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Aim: To analyse the histologic findings and epidemiology of parotid pathology from three major centres in Trinidad and Tobago.

Methods: The electronic medical records of 144 histology and cytology were analysed for the period October 2003 to February 2012 from Port-of-Spain General Hospital (POSGH), Sangre Grande Hospital (SGRH) and Tobago Regional Hospital (TRH). Data were collected on age, gender, year and hospital. Primary parotid and metastatic disease rates were calculated.

Results: There were 70 males (48.6%) and 74 females (51.4%) with 90% at POSGH, 8% at SGRH and 2% at TRH. Primary parotid tumours accounted for 50 cases. These included 41 (82%) benign (mean age 48 years with the 51–60-year age group being most commonly affected) and nine (18%) malignant (mean age 50 years). Of the 41 benign lesions, there were 34 (83%) pleomorphic adenomas and seven (17%) Warthin's tumours. Primary malignant tumours included three invasive mucoepidermoid carcinomas (33%), two acinic cell carcinomas (22%), two adenoid cystic, one anaplastic and one papillary carcinoma. Other lesions included three metastatic lesions from the breast/lung and six squamous cell carcinomas, one with amyloid, one lipoma and one basal cell carcinoma. There were two cysts and nine cases of sialadenitis. Fine needle aspiration cytology (FNAC) was done in 56 cases: 25 males and 31 females, with 52 (91%) from POSGH. Malignant cells were detected in four cases (7%), benign cells in 27 (48%), inflammatory cells in seven (12.5%) and no cells in 17 cases (30%).

Conclusions: The ratio of benign to malignant parotid tumours is in keeping with worldwide statistics. The peak age group for benign and malignant tumours is the 51–60-year age group in both. Fine needle aspiration cytology has some value, but has a high inadequate sample rate.

The postcode lottery: effects on colorectal cancer stage and long-term survival

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Introduction: Colorectal cancer (CRC) outcomes vary in the United Kingdom (UK) between centres, with patients from deprived backgrounds presenting at an advanced

stage and having poor long-term survival. Our aim was to analyse the outcome of patients undergoing curative CRC resections based on their socio-economic status (SES).

Methods: Data from a prospectively constructed database between the years 2006 and 2010 were analysed. Primary endpoints were 30-day mortality and presentation stage with secondary endpoints being long-term survival. Socio-economic status was determined from postcode using UK geodemographic database providers.

Results: A total of 662 patients undergoing curative CRC resections were identified. Colonic resections accounted for 57.5% (n = 380) compared to 42.5% (n = 282) of rectal resections. Dukes C stage cancers was diagnosed in 47.1% of patients (n = 312). Thirty-day mortality was 3.8% with an overall median survival of 75 months for all patients. On the basis of SES, patients were divided into three groups: high (10.2%), middle (32.8%) and low (57%). No significant survival benefit was seen between patients from different SES ($p = 0.78$, Mantel-cox). When stage at presentation was compared, patients from a high SES (23.1%) were more likely to present at an earlier stage compared to those from a low SES (14.4%) [$p = 0.03$ Chi-square test]. Overall, 30-day mortality was significantly lower in patients from a higher SES (n = 2/27 vs n = 17/27).

Conclusions: Patients from a low SES tend to present with a more advanced disease stage and have a higher 30-day mortality. In our study, overall survival was not affected by SES, contrary to what is stated in the literature.

The societal value of surgical services: an EQ-5D value set for Trinidad and Tobago

H Bailey

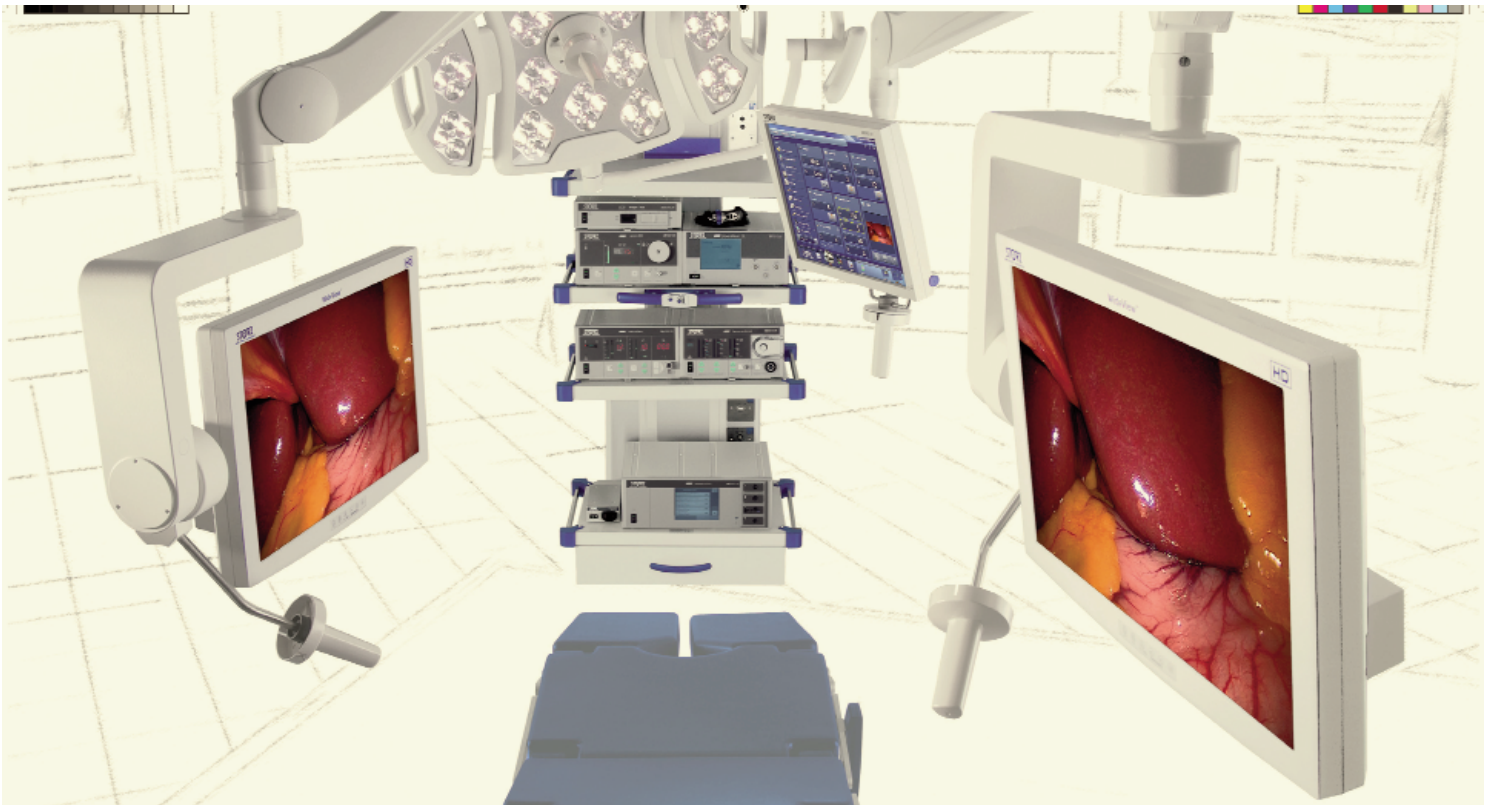
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Objective: Policy-makers in healthcare everywhere confront the challenge of allocating resources among treatments and programmes that produce qualitatively different outcomes. For example, if an extra \$1 million became available to a hospital, how should it be allocated among programmes? Should the hip-replacement, dialysis, cardiac surgery or other service be given priority? Such considerations should be informed by an understanding of the value that society would place on the 'health' that would be 'produced' by expanding these programmes. This study develops a framework that will allow clinicians and policy-makers to perform such valuations based on societal preferences.

Methods: The EQ-5D-3L instrument breaks health-status down into five dimensions (1 – mobility, 2 – ability to perform self-care, 3 – ability to perform usual activities, 4 – pain/discomfort and 5 – anxiety/depression) in three levels (no/moderate/extreme problems on each dimension). A discrete choice experiment (DCE) was used to elicit preferences among a valuation set of EQ-5D states from a representative sample of 204 adults in Trinidad and Tobago. Discrete choice experiment data were analysed using a mixed multinomial logit (MMNL) model.

Results: Mixed multinomial logit analysis produced a preference function that allowed the construction of a value set that covered all 243 ($= 3^5$) combinations of dimensions and levels in the EQ-5D-3L instrument.

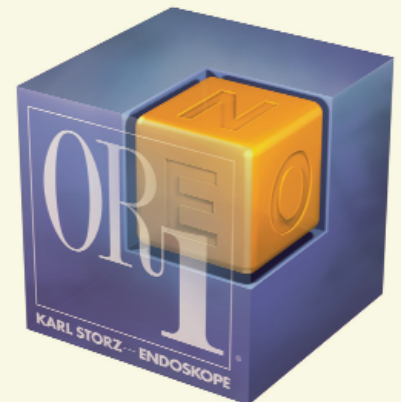
Conclusion: The EQ-5D value set can be used to inform resource-allocation decisions in healthcare by providing the quality adjustment for cost-per-quality adjusted of life year (QALY) analysis. The presentation will include a new collaborative research agenda for the valuation of surgical and clinical interventions using the EQ-5D value set and the estimation of value sets in other Caribbean territories.



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