ASIT SHORT PAPER PRIZE: 0936 WINNER OF ASIT/EITHCON SURGICAL EDUCATION PRIZE: A NOVEL APPLICATION OF LEARNING CURVE ANALYSIS FOR A BASIC TASK IN SINGLE-INCISION LAPAROSCOPIC SURGERY

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Aims: There is currently no objective quantification of the temporal changes in performance associated with a novice surgeon learning SILS operative tasks. Analyzing learning curves allows us to objectively quantify performance.

Methods: 36 surgically-naive medical students were randomized to complete the validated peg transfer task over 50 repetitions using either 1) conventional laparoscopic set-up 2) SILS set-up with straight instruments 3) SILS set-up with articulated instruments or 4) SILS set-up with articulated instruments after having reached proficiency using a conventional laparoscopic set-up. The data was analysed using univariate and multivariate regression models, and by fitting an inverse curve to derive measures for the asymptote and rate of learning of each group.

Results: There was a significant increased overall proficiency between the group trained in conventional laparoscopy and all other groups (p=0.01), with no difference between the other groups.

Conclusions: The results of this study indicate that the proficiency reached using a conventional laparoscopic set-up cannot be matched using a SILS configuration for the novice surgeon, and that the choice of straight or articulated instruments as well as previous laparoscopic training does not confer an advantage in this basic task.

POSTER ABSTRACTS

Basic science including anatomy

0470: SRC KINASE: GOOD OR BAD IN PROSTATE CANCER?

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Aim: To assess expression levels of c-Src and activated Src in 2 demographically separate hormone-naïve prostate cancer cohorts and determine their influence on patient survival.

Method: Immunohistochemistry using validated antibodies to c-Src and SrcY419 (the classical activation site) was used to determine expression and phosphorylation was enhanced in all untreated and treated K1 cells of OPN in K1 (OPNsh) cells underwent a regimen, either untreated or treated (hepatocyte growth factor (HGF), OPN or hyaluronan (HA)). Western Blot analysis was undertaken to analyse expression and phosphorylation events.

Results: OPNsh cells showed higher levels of Met receptor expression than K1 cells; Met showed phosphorylation in the absence of OPN. Paxillin phosphorylation was enhanced in all untreated and treated K1 cells compared to OPNsh cells. Phosphorylation of coflin in both cell lines showed notable changes.

Conclusions: A decrease in Met levels in OPNsh cells does not seem to be the reason for loss of invasiveness but there may be impairment of Met receptor activation. The absence of OPN seemed to demonstrate an important effect on the activation paxillin and coflin. This suggests a vital role for integrins in the loss of tumour cell invasiveness and motility in OPNsh cells.

0562: PARENTERAL NUTRITION IN ROUTINE SURGICAL PRACTICE – ROOM FOR IMPROVEMENT

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Aims: Parenteral Nutrition (PN) administration in carefully selected surgical patients maximises recovery protocol, PN provision was compared against the European Society of Parenteral and Enteral Nutrition (ESPEN) 2009 guidelines to identify areas for improvement in clinical practice.

Methods: A prospective study based on collected PN referral forms was conducted between January and June 2011.

Results: Fifty-one patients received PN (29M: 22F), ESPEN criteria concluded 44/51 (86%) referrals were appropriate, whereas 7/51 (14%) were inappropriate since caloric intake were sufficient enterally. Of the 51 patients, 43/51 (84%) were postoperative cases where PN was used in: 23 with peri-operative complications, 12 who were unable to feed enterally, 5 as additional nutritional supplementation, and 3 with short bowel syndrome. In 8/51 (16%) non-operative individuals, gastrointestinal dysfunction led to PN use.

PN was administered centrally in 30/51 (59%) and peripherally in 21/51 (41%) of patients. The median range for duration of PN was 4-6 days. The overall complication rate of PN administration was 24%, including line infection in 11 (22%), and pneumothorax in 1 (2%).

Conclusion: Judicious usage of PN improves outcomes for surgical patients. As complication rates remain high, formal training on PN have been instituted locally and re-assessment of outcomes is awaited.

0707: IS THE RULER IN DIGITALISED RADIOGRAPHS ACCURATE? – A STUDY WITH QUESTIONNAIRE SURVEY

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Objective: The aim of this study is to assess the opinion of practicing orthopaedic surgeons and radiology consultants with regards to the use of the ruler in digitalised radiographs.

Methods: We compiled a questionnaire on the accuracy, magnitude on patient survival. Of the 51 patients, 23/51 (46%) were postoperative cases where PN was used in: 23 with peri-operative complications, 12 who were unable to feed enterally, 5 as additional nutritional supplementation, and 3 with short bowel syndrome. In 8/51 (16%) non-operative individuals, gastrointestinal dysfunction led to PN use.

PN was administered centrally in 30/51 (59%) and peripherally in 21/51 (41%) of patients. The median range for duration of PN was 4-6 days. The overall complication rate of PN administration was 24%, including line infection in 11 (22%), and pneumothorax in 1 (2%).

Conclusion: Judicious usage of PN improves outcomes for surgical patients. As complication rates remain high, formal training on PN have been instituted locally and re-assessment of outcomes is awaited.