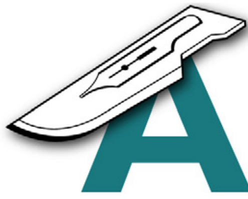

ASiT The Association of Surgeons in Training

levels. For each year, the last 10 neck dissections carried out by specialist registrars during their one year training at the centre were analyzed, with the last 10 neck dissections carried out by consultant surgeons. Eight registrars at different stages of training and three consultant head and neck surgeons were used. Comparison was made between the two groups for each of the six oncological levels (and sub-levels).

Results: Independent t-test analysis showed there were no statistically significant differences in lymph node yield for any oncological levels between consultant surgeons and specialist registrars ($p>0.05$). The most notable difference, albeit non-significant, was for Level III lymph nodes, with consultants yielding a mean 6.5 lymph nodes ($n = 38$) and registrars yielding 4.5 lymph nodes ($n = 24$) ($p = 0.08$).

Conclusion: The lymph node yield of neck dissections carried out by specialist registrars towards the end of their year of head and neck training does not differ significantly from consultants.

BREAST CANCER SURGERY: OUTCOMES IN THE ELDERLY POPULATION

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Aims: This study aimed to assess post-operative outcomes in elderly women undergoing breast cancer surgery in our institution.

Methods: Outcomes of all patients diagnosed with breast cancer in 2008 were reviewed. Patients were categorised according to age (= 70, 71–80 and >80 years).

Results: 284 patients were diagnosed with breast cancer in 2008. Of these, 29 did not undergo surgery (5 = 70, 4 71–80 and 17 >80): 12 declined surgical treatment and 14 had inoperable tumours. Only three patients (one 71-80 and two >80) were not offered surgery due to co-morbidities. 255 patients [176 = 70, 55 71–80 and 31 >80] underwent surgery. Median hospital stay was 1 day in each age group. 7(4.0%) patients aged = 70, 3(5.5%) aged 71–80 and 4(12.9%) aged >80 developed wound infections. Seromas occurred in 46(26.1%), 19(34.5%) and 9(29%) patients respectively. Only 1 patient (aged = 70) returned to theatre due to complications. There was no in-hospital mortality.

Conclusions: Post-operative outcomes in elderly patients undergoing breast cancer surgery are similar to those of younger patients, without an increase in length of hospital stay. This data facilitates informed and shared decision-making between patients and the multi-disciplinary team.

MANAGEMENT OF SUSPECTED APPENDICITIS IN OLDER PATIENTS: WHAT IS THE RIGHT APPROACH?

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This study compares the outcome of planned appendicectomies in patients aged 50 years or more with that in younger patients. The data on all patients from a single institution who were listed to have appendicectomies over six years were collected retrospectively. Histopathology results and operative findings for older patients (>50 years) who had negative appendicectomies were compared with that of younger patients. 1059 patients were included in the study. 125 patients were in the older group and 934 patients were in the younger group. 38 patients (30.4%) in the older group did not have appendicitis confirmed on operation, as compared to 270 patients (28.9%) in the younger group. Of those who had negative appendicectomies, 20 patients (52.6%) in the older group and 22 patients (8.15%) in the younger group were found to have significant pathologies which would have been better managed with formal midline laparotomies. The rates of negative appendicectomies were similar between both groups, the proportion of negative appendicectomies with pathologies requiring formal laparotomies were significantly greater in the older group. This justifies the need for either pre-operative radiological investigations to confirm the diagnosis or a diagnostic laparoscopy before proceeding with appendicectomy in older patients.

CLINICAL EXAMINATION AND ULTRASONOGRAPHY ARE ADEQUATE FOR THE ASSESSMENT OF GYNAECOMASTIA

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Introduction: The imaging modality used to exclude the presence of neoplasia in gynaecomastia remains controversial. We evaluated whether our practice of clinical examination in combination with ultrasonography is a reliable method for the assessment of gynaecomastia.

Methods: All patients referred with gynaecomastia to our out-patient clinic between January 2006 to December 2008 were included in the study. Pathological records during this period were examined to ensure no cases of male breast cancer were missed.

Results: A total of 53 patients were included in the study. Patients had a median age of 52 years (range 14-86 years). Median follow-up of patients was 3 months (range 0-6 months). Following clinical assessment 3 patients (5.6%) had a clinical suspicion of malignancy. Ultrasonography and subsequent biopsy confirmed malignancy in 2 patients. In the other patient ultrasonography detected benign breast pathology which resolved 6 months later. The remaining 50 patients underwent ultrasound assessment which confirmed clinical findings of benign gynaecomastia. Our study showed that clinical examination and ultrasonography have a sensitivity, specificity and negative predictive value of 100% for the exclusion of neoplasia in male gynaecomastia.

Conclusion: The use of clinical examination and ultrasonography is an effective means of the exclusion of neoplasia in gynaecomastia.

DOES THE USE OF 3D ENDOANAL ULTRASOUND IMPROVE INTEROBSERVER AGREEMENT COMPARED WITH 2D ULTRASOUND IN SPHINCTER DEFECTS?

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Background: Endoanal ultrasound (EAUS) is used in the assessment of anal sphincter defects. The aim of this study was to determine if the inter-observer agreement was better using 3D technology, which is less operator dependent, compared with 2D.

Methods: Images of ten patients undergoing EAUS were obtained in 2D and 3D. The images were interpreted by 4 specialists, 1 radiologist and 8 colorectal surgeons. Each image was graded as normal, internal sphincter injury, external sphincter injury or combined injury.

Results: The overall inter-observer agreement was low for the ten 2D and 3D images ($k = 0.16$ and $k = 0.22$ respectively). Within specialists, there was moderate agreement ($k = 0.42$ and $k = 0.44$ respectively). There was no interpretation advantage for the 3D device with the subgroup of 8 surgeons and a radiologist who do not routinely report scans ($k = 0.11$ and $k = 0.16$ respectively).

Conclusions: Despite the ability to view the whole anal canal in different planes, the 3D technology appears to only slightly improve inter-observer agreement in expert hands. Our results would suggest interpretation of 3D EAUS still remains operator dependent.

OPTIMISING SKILL ACQUISITION FOR LAPAROENDOSCOPIC SINGLE-SITE SURGERY USING THE TIME-LAG MODEL

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Introduction: Acquiring skills for Laparoendoscopic Single-Site Surgery (LESS) is complex and shown to have a very steep learning curve. We aimed to develop and test the novel concept of Time-Lag for LESS skill acquisition using an ex-vivo training module.
Methods: We used a Time-Lag Camera-Monitor System that allows for a 2.0 second delay between real-time hand movement and the perception of the movement on the monitor. We tested the impact of time-lag on the time taken to learn to perform a simulated Vesicourethral Anastomosis (VUA) by taking two groups of 3 novices and training the first group to perform the procedure with the time-lag system, and the second without the time-lag. Once each novice could perform the procedure satisfactorily, each group was timed in performing the VUA in a real-time setting.
Results: The group who had initially trained with the time-lag system performed the final VUA 1.8 times faster than the second group. Video analysis showed that novices who trained using the time-lag system had reduced intention anxiety compared to the second group.
Conclusions: The Time-Lag model has potential application in acquiring skills for LESS. It could be used for preliminary skill acquisition in other laparoscopic procedures during training.

PATIENT COMPLIANCE WITH EXTENDED LOW MOLECULAR WEIGHT HEPARIN INJECTIONS FOLLOWING HIP AND KNEE ARTHROPLASTY

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Introduction: Recent NICE guidelines have recommended extended thromboprophylaxis following hip and knee arthroplasty. Our protocol uses 28 days of low molecular weight heparin (LMWH) subcutaneous injections, self administered where possible, and given by relatives or a district nurse where not possible. Recently an oral alternative, Rivaroxaban, has also been recommended by NICE. Little is known about patient compliance with extended duration self administered subcutaneous injections, and this study aims to determine this.
Methods: 42 consecutive patients undergoing hip and knee arthroplasty were prospectively contacted during their fifth post-op week. An anonymous questionnaire was completed by each patient about the LMWH injections they received after discharge from hospital.
Results: All patients responded. One was excluded for being on warfarin. Twenty nine patients were discharged with the intention of self administering LMWH injections, eight with the intention of administration by a relative, and four by a district nurse. 90% (n = 37) of patients reported not missing any doses, 5% (n = 2) missed one dose and 5% (n = 2) missed two doses.
Conclusions: Patient compliance with extended duration thromboprophylaxis using LMWH injections is extremely high. Oral thromboprophylaxis may be useful in the minority of patients requiring daily visits by a district nurse to administer their injections.

PAEDIATRIC PLASTIC SURGERY TRAUMA – ARE WE AWARE OF THE SERVICE NEEDS?

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Background: Trauma and minor surgical problems account for 85% of childhood attendance at UK Emergency Departments. There is a challenge for hospitals to provide an efficient paediatric trauma service. Paediatric plastic surgery trauma referral is increasing and attention to planning and resource management is necessary.
Methods: A 1-year retrospective study of operated patients at a specialist plastic surgery unit in a London teaching hospital. The PICIS theatre system, theatre logbooks and patient notes were used to analyse the demographics and nature of paediatric plastic surgical emergency services provided.
Results: 510 paediatric patients aged = 16 years were treated in the study. Only 63 cases were managed in designated paediatric theatres. Male patients were more prevalent (61.8%) with a higher number of injuries occurring during March, May and July. Nailbed (28.6%) and facial lacerations (28.2%) were the most common, followed by hand explorations (24.1%) including nerve, tendon and vessel repair.
Conclusion: Paediatric Plastic Surgery emergencies consist mainly of nailbed and facial lacerations that can be dealt with efficiently. It is essential to understand these trends and ensure adequate services are available especially during the spring/summer months.

ASSESSMENT OF INFLAMMATORY MARKERS AS DIAGNOSTIC ADJUNCT IN ACUTE APPENDICITIS

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Aim: This study aims to determine the role of acute inflammatory markers, White Cell Count (WCC), Neutrophil Count (NC) and C-reactive protein (CRP), in establishing the diagnosis of appendicitis.
Methods: A retrospective study. Patients were included if two of three markers were recorded. Histological diagnosis was considered for the purpose of sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) analysis.
Results: A total of 101 patients were included (61 males). Median age was 29 years (range: 8 to 83). Histological diagnosis was confirmed in 90% (n = 91) thereby negative appendicectomy rate was 10%. WCC and NC were recorded in all and CRP in 94% (n = 95) patients. Elevated levels of WCC, NC and CRP had a Sensitivity of 73%, 78% and 75% with a PPV of 95%, 96% and 95% respectively. The Specificity of above was 70%, 70% and 62%, and NPV was 22%, 26% and 20%. Combined analysis of three markers had considerably higher sensitivity, specificity, PPV and NPV of 84%, 100%, 100% and 50% respectively.
Conclusion: High sensitivity and PPV of combined analysis of three inflammatory markers provide diagnostic accuracy in acute appendicitis. Levels of an inflammatory marker alone are less sensitive and should be interpreted with caution.