

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.