are widely used in surgical training centres, and should be subject to the same validation processes that computer based simulators have been.

**VALVE REPLACEMENT IN HAEMODIALYSIS: BLEEDING RISK IN MECHANICAL VS BIOPROSTHETIC VALVES**

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**Background:** There is a higher incidence of valvular heart disease in patients with chronic renal failure undergoing haemodialysis than in the general population. Whether mechanical or bioprosthetic valve replacement is associated with a better outcome in patients on chronic dialysis is an ongoing debate. A major complication is bleeding, thought to be due to platelet disorder and uraemia.

**Aim:** To assess the incidence of bleeding complications in patients who have had mechanical versus bioprosthetic valve replacements.

**Methods:** We undertook a retrospective review of 13 patients with end-stage kidney disease on long-term haemodialysis who underwent aortic (n=7) or mitral (n=6) valve replacement. The mean age was 64.77. Mean length of time on dialysis was 57.15 months. Patients had similar cardiovascular co-morbidities.

**Results:** Incidence of valvular heart disease requiring replacement in our population of patients on haemodialysis was 13 out of 671 (0.02%). Of these, 6 had bioprosthetic and 7 had mechanical prostheses. Patients with mechanical prostheses were anticoagulated; 6 on warfarin and 1 on phenindione. Bleeding complications occurred in 5 out of 13 (38%); 4 (80%) of which were on warfarin, and 1 (20%) who was not anticoagulated.

**Conclusion:** Our results show an increased risk of bleeding when these patients are put on warfarin. Patients starting haemodialysis have an average life expectancy of 8.8 years (Kao et al, 2010). Our results suggest that a preference for bioprosthetic valve replacement should be given in patients over 60 years of age undergoing chronic haemodialysis, to reduce the risk of developing bleeding complications.


**A NOVEL CORRECTION OF CONGENITAL EAR DEFORMITIES IN WALES**

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**Background:** Congenital ear deformities can have a significant impact on both a child’s appearance and psychosocial well-being, often requiring otoplasty. Evidence from the literature suggests that the use of auricular splints before the age of 6 months is effective at improving auricular appearance thus preventing the need for surgery. Success rates are highest if splinting is started within the first 10 days of life. Presented are the results of the first Welsh patients treated with auricular splinting.

**Methods:** All 13 patients treated with auricular splinting in the Plastic Surgery Outpatient Department were reviewed. Questionnaires were sent to parents asking them to rate the change in appearance of their child’s ear/s. Change in appearance could be rated as Excellent, Improved, Recurred, Not Improved, Gave Up: a classification for results used by several authors. Ears judged as Excellent or Improved would not require corrective otoplasty. Patient records were reviewed to determine referral times and patterns.

**Results:** 78.95% of ears (n=19) treated were judged as excellent or improved and would not require future surgery. The mean age at which splinting was started was 94 days (range 19-151). The mean splinting duration was 9.3 weeks (range 5-18). Mean age at referral was 60.2 days (range 5-150).

**Conclusions:** Auricular splinting was shown to be effective at improving cosmetic appearance of congenital ear deformities and preventing the need for surgery. Improved results could be obtained by reducing mean age at referral. Splinting should be offered to all neonates/infants with congenital ear deformities.

**THE EFFECT OF PSYCHOLOGICAL STATUS ON PAIN AND SURGICAL OUTCOME IN PATIENTS REQUIRING ARTHROSCOPIC SUBACROMIAL DECOMPRESSION**

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**Introduction:** Preoperative depression and anxiety have been linked to poorer postoperative outcomes; increased pain and longer recovery. Few studies have investigated this relationship in patients requiring upper limb orthopaedic surgery. This study explored the relationship between preoperative depression and anxiety and postoperative shoulder pain and function in patients requiring arthroscopic subacromial decompression (ASAD) for impingement syndrome.

**Methods:** A consecutive series of patients undergoing ASAD in 2009/10 were investigated. Mental state, shoulder function and shoulder pain were assessed using the Hospital Anxiety and Depression Scale, the Oxford Shoulder Score and the Pain Visual Analogue Scale. Questionnaires were completed 2 weeks preoperatively and 3 and 6 weeks postoperatively. The local research ethics committee approved the study.

**Results:** 21 patients (7 male; mean 55 years) participated. Preoperatively, 5 (24%) patients were anxious, 5 were depressed and 2 were both. Spearman’s rank order correlation demonstrated no significant correlation between preoperative depression and anxiety and postoperative shoulder function or pain. Preoperative anxiety correlated significantly with preoperative shoulder pain (p<0.05) but only moderately with pain postoperatively. Preoperative depression predicted postoperative anxiety. Wilcoxon signed ranks test demonstrated significant improvements in patient shoulder function, pain and mental state at 6 weeks postoperatively (p<0.05).

**Conclusion:** Weak associations were found between anxiety and shoulder function, and between depression and shoulder pain and function. These associations would remain insignificant even if the sample size was trebled. However the correlations between anxiety and pain do warrant further investigation. Mental state significantly improved by 6 weeks postoperatively highlighting the psychological benefit of ASAD.