

# Good Practice and Adverse Drug Reactions

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A-Optimizing protocols for patients going home after a hospital stay. In a study showing the potential of preoperative bladder scanning in order to predict post operative urinary retention was done in patient undergoing a total joint arthroplasty. The fact that we are doing more and more out-patient joint replacement, has demonstrated a need to monitor some parameters like urinary infection because of frequent visits in the ER. Other parameters of concern dealing with post op wound drainage and pain management may be added to this routine. Wound management has also shown an interest in this approach especially when such patients were placed on tranexamic acid while wearing impermeable dressing that can last longer.

Magaldi et al reported in the last JBJS issue in April 2024, the risk of post operative urinary retention (POUR) in total joint arthroplasty and found that pre-operative bladder scanning was predictive of urinary retention. 507 patients (324 F and 183 M) who underwent total knee arthroplasty (TKA), TOTAL hip arthroplasty (THA) and completed the pre-operative scanning post-void bladder as well as a questionnaire of the American Urological Association. 37% of patient undergoing THR and 23% of patient with TKA were defined with a bladder requiring catheterization with more than 500 cc of volume retention (residual). Researchers found that an increasing post void residual volume on pre-op bladder was predictive of POUR following the surgical procedure. They found also that increasing post-void residual volume on a pre-Op bladder scan was predictive of urinary retention (POUR) following the surgical procedure.

High community researches like that one need to be encouraged in the community because it is better for a patient to sleep in his own bed while avoiding unnecessary trips to the ER.

B- A Quality control on a retrospective study involving the use of intrawound vancomycin powder (IVP) to decrease the rate of periprosthetic joint infection (PJI) was conducted, three months following a total hip replacement (THR) from Oct 2021 to Sept 2022. It was compared with other protocols. It was discovered that a positive culture was discovered following the total hip arthroplasty. Secondary outcome included gram-negative culture with overall operation rate, wound complications, re-admission and wound complications within 90 days in the post-op period.

1193 Primary Total Hip Replacement were identified for analysis and 523 patients have received IVP while the remaining did not. Those patient in the IVP group had a higher rate of culture-positive joint infection with a ratio of 1.7 and they do present a higher re-operation-rate with wound infection. The overall readmission rate was 6.1 compared to 2.8 among other who had THR and did not receive IVP.

The use of IVP in Arthroplasty was then found associated with a higher rate of post operative joint infection and re-admission in the control study. Further studies are on-going and suggestions to avoid the use of IVP in THA was strongly suggested.

C- An orthopedist in Philadelphia just performed at the Rothman Orthopedic Institute, the first reverse total shoulder arthroplasty using Apple Vision Pro. A three-D camera. Total Joint Replacement are moving into an out-patient procedure. Joint Replacement are increasing in number and more facilities are using Robotics to assure a successful outcome. Several companies are urging us to train with Robots in order to enhance our skills in Total Joint Replacements. Velly's Robotic System and Zimmer-Biomet's Rosa are venturing in new technology. Surgeons are learning how to use the Robot to help them performing the cut with better precision.

D- Recent clinical outcome in Carpal Tunnel Release Mini-Open Techniques with Palmar Incision (Mini OCTR) vs Endoscopic Technique with wrist Cease Incision (ECTR) was re-visited by Ryo Nakamichi et al. The two techniques for carpal tunnel release were compared once more time to discuss their therapeutic efficacy.

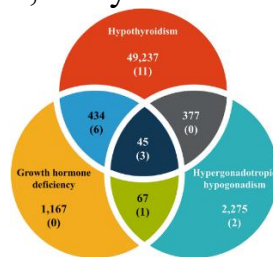
16 patients benefited from a mini-OCTR and 17 had ECTR and were examined pre and post operatively at 1,3,5 months using the Visual Analogue Scale (VAS). Disability scores were also used for the Arm, Shoulder and Hand (DASH). Pain and Cosmesis were kept in mind as well as patient satisfaction.

Both surgical techniques showed improvement at 6 months post-operatively. The DASH score was lower in the ECTR group than the mini-OCTR group. The Pain VAS score was lower in the ECTR group. The Cosmetic VAS was significantly lower in the ECTR group.

In conclusion, ECTR in wrist resulted in better pain and cosmetic recovery in early post-operative phase compared to the mini-OCTR in palmar incision, making this procedure as a satisfactory method of treatment.

E- Endocrinopathy has always been identified as a risk factor in individual suffering from Slipped Capital Femoral Epiphysis (SCFE). At a Seoul National University Children Hospital in the republic of Korea, the question was explored again, and a new population cohort study is again available in JBJS and published in JBJS.org. The national database was used from 2019-2021 in children born between 2002 and 2005 until their age of 14.

Using a nationwide database, the investigators identified all new diagnoses of endocrinopathy or SCFE from 2002 to 2019 in children who were born between 2002 and 2005 (for a minimum follow-up of 14 years from birth). “We aimed to determine (1) the incidence of SCFE in children with endocrinopathy overall, as well as in children with specific endocrinopathies, compared with that in children without endocrinopathy, (2) whether the incidence of SCFE increases with the number of deficient hormones, and (3) the clinical characteristics of endocrinopathy-associated SCFE,” they



write.

The study was published on JBJS.org, using a data base of patients suffering from SCFE from 2002 to 2019 in children born between 2002 and 2005. The

investigators are trying to determine if the incidence of SCFE increased with any deficient hormone. Among 1 Million 800 children, 181 were diagnosed with SCFE. The authors found 80,760 cases of SCFE but of the one with endocrinopathy, they found 14 males and 16 Females. The incidence in SCFE was four time more in children with endocrinopathy. Growth Hormone deficiency demonstrated the higher incidence of SCFE.

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