Symposium: 2014 Knee Society Proceedings

Papers Presented at the Annual Meetings of The Knee Society: Editorial Comment

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This year's Proceedings of the Annual Meeting of the Knee Society includes selected manuscripts originally presented at the 2013 Knee Society Members Meeting held in Toronto, Canada in September 2013, as well as those from the 2014 Open Scientific Meeting of the Knee Society held in New Orleans in March 2014. Each paper in these Proceedings has undergone rigorous peer-review to ensure that the content is focused, informative, and scientifically meaningful. My great thanks are extended to

the dedicated staff at *CORR*® for their valuable work in guiding authors through that review process. While all of the papers in these Proceedings contain important findings, I would like to highlight three papers of which we are particularly proud: Our 2014 Knee Society Award winners.

The 2014 Chitranjan Ranawat Award paper, a randomized clinical trial conducted at the Mayo Clinic in Arizona by Spangehl and colleagues [3], evaluated the effectiveness of a peripheral nerve block (combined femoral and sciatic) versus a periarthicular local anesthetic injection with ropivacaine, ketorolac, and epinephrine in managing pain after TKA. Spangehl and colleagues reported that both groups demonstrated low pain scores for the first several days after TKA surgery with limited use of narcotic pain medication for breakthrough pain in both groups. Current options for advanced pain management focus on a multimodal approach that minimizes the need for parenteral opioid medications and typically includes preoperative medications, intraoperative regional anesthesia, postoperative nonopioid medications on a schedule, and then an adjunctive technique such as peripheral nerve block, periarticular local anesthetic cocktail injection or

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local anesthetic infusion into the joint. As individual institutions and surgeons search for the ideal combination of pain management modalities to minimize pain and maximize efficient, this study provides important information.

The 2014 John Insall Award paper by Browne and colleagues [1] reported on a large matched-controlled series of patients with morbid obesity who underwent TKA. This paper demonstrated that morbid obesity is a prime driver of greater complications, higher mortality and more intensive resource utilization after contemporary TKA. In recent years, there has been conflicting information on the impact of obesity

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on various outcomes after knee arthroplasty. Public-reporting initiatives and payer-based incentive programs should seek to risk-stratify patients with morbid obesity emerging as one important criterion.

The 2014 Mark Coventry Award paper by Pulido and colleagues [2] reported the 5-year outcomes of a highly porous trabecular tibial component compared to a cemented modular tibial tray. For quite some time, total knee surgeons have sought evidence of an effective porous ingrowth surface for knee components with many surgeons expecting that ultimately, as is the case in total hip surgery, most total knees may be done with some form of biologic fixation. This randomized trial clinical trial done at the Mayo Clinic demonstrated that on the tibial side, a highly porous metal fixation was reliable and durable at 5 years when compared to a cemented modular implant. Whether such a fixation surface is reliable and durable for femoral fixation remains unclear.

Coupled with the award papers, the papers in these Proceedings span a spectrum of topics related to the surgical management of the arthritic knee. These papers can be grouped into

topics of current interest including durability, alignment, patient management in the primary TKA, health policy, nonarthroplasty options, and revision. Recently, it has become clear that there is room for improvement in regard to the real-world function of total knee replacements. While TKA is reliable and durable in alleviating pain and improving function relatively few patients report that their total knee replacement is just like their native knee joint. Recognition of this has led to a resurgence of interest in both surgical technique and implant design.

In these Proceedings, there also is useful information related to total knee durability as well as some interesting discussions about component alignment. In the health-policy area we understand now that continued government and private-sector scrutiny of total joint arthroplasty is to be expected given the large economic impact of these procedures. A better understanding of health-related costs and the reporting of outcomes and complications is important if surgeons are to remain involved in these discussions. Finally, it is the intention of The Knee Society to provide readers of these Proceedings with clinically useful information that either improves

surgical practice or piques their intellectual curiosity.

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